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IN A PRACTICAL SCIENTIFIC FARMERS OWN PAPER

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TRANSACTIONS OF THE N. Y. STATE AG. SOCIETY.

We are indebted to the Secretary, B. P. Johnson, Esq., for the eighteenth volume (1858) of the *Transactions of the New York State Agricultural Society*. We regard it as one of the most interesting and useful volumes yet published by the Society. We make a few extracts.

Thorough-bred Stock becoming more general. —In alluding to the Fair held at Syracuse, the Secretary well observes—

"The State of New York had full reward for its liberal policy toward agriculture, in the collection to be found at Syracuse, on that day. In the earlier years of the Society, the Fair was indebted to a few men—men of real enterprise—men who knew in advance the directions which the good judgment of the farmers in our State would take; it was the debtor of these gentlemen for the fine varieties of the very best breeds of stock; there were fine herds and few owners. But in this Fair of 1858, a nobler result was seen. There were the same superb cattle, the same choice varieties; *but there were many owners*. It was the proof of the gratifying fact, that the farmers of the State had *learned the value of the best*."

Grade Stock.—"Another feature most gratifying was the perfection of the grade cattle on exhibition. Of these, many of them might challenge competition in all the points constituting a good animal, and these of various crosses from the Short Horns, Devons, and Herefords. When it is known that the stock represented about one-half of the farming counties in our State, it will be seen that the distribution of improved stock is widely extended; and the increase of wealth to the farmers, by this stock alone, amounts to an immense sum."

Fat Cattle.—"The fat cattle were of extraordinary excellence, showing that we have arrived at great perfection in this direction. Small bone, aptness to fatten, meat of the best quality, and laid on in the right place, so that the excellent judges in this class declared they had never seen the cattle excelled, and never had found such difficulty in deciding the prize animals."

Improved Breeds of Cattle do not deteriorate in this Country.—In proof of this, the following fact is mentioned:

"Upon the ground were several imported animals, of very great merit and renown; and yet we heard from judges well prepared to give an opinion, that no finer animals could be found than among those bred on our own soil and by our own breeders, fully sustaining the character of the choice animals from which they were descended."

The Annual Fairs of the Society especially beneficial to the Localities in which they are held.—In moving a vote of thanks to the Hon. Joseph R. Williams, for his interesting address at Syracuse, George Geddes said:

"I rise to move a vote of thanks to the speaker: but before you put the question, allow me, as one of the farmers of this county of Onondaga, in behalf of my brethren, to return our thanks to your Society for this your third exhibition among us. We thank you for giving us the lessons that must be drawn from placing side by side, for comparison, the finest specimens of all the varieties of domestic animals and of the products of the garden and field, as well as for this magnificent display of farm implements which we see before us. This is a State Society, and I know is the instructor of the whole State; but particularly is it the instructor of the localities that are so fortunate as to again and again witness the great annual shows. Allow me to add that your lessons, in Onondaga, have not been entirely lost; the improvement here is manifest in every branch of farming since you held your Fair among us. I can assure the orator, to whom we are about to return our thanks, that the standard he has just held up before us, as showing what a farmer's life should be, if not entirely arrived at here, has nevertheless been approximated. If he will do me the pleasure of riding in my company over these majestic hills and beautiful valleys, I will show him many specimens of high and judicious cultivation, and many a pleasant homestead surrounded with fruits and flowers. And within these houses, on the center tables he shall find elegant and useful books, with the newspapers of the day, and on the shelves many of the standard authors, and in not a few instances some of the ancient classics; and, sir, he will find that the women that he will meet there, will acquit themselves with credit, either in the parlor or the dairy."

Agricultural Discussions.—Meetings were held in the evenings, during the Fair at Syracuse, for the discussion of practical subjects. We have before alluded to them, but a few extracts from the full report in the *Transactions* will be interesting. Many

of the most experienced farmers in the State are present at these annual gatherings, and we trust such meetings for discussions will always be held in future,—and we are glad to know that such is the intention of the Society.

Grow more Root Crops.—"The Hon. A. B. CONGER, President of the Society, made an earnest address to the farmers present to abandon the exhaustive process and adopt the root cultivation. He believed in the English dogma, that without roots for food, there must be few cattle; that with few cattle there must be little manure; and that with little manure there must be light crops.

SOLON ROBINSON observed, in regard to feeding root crops, that the bad taste imparted to the butter by feeding turnips, could be removed by putting a piece of charcoal into the milk before churning, which would disinfect it thoroughly."

Husking Corn.—"SOLON ROBINSON observed that the most economical process of husking corn is practiced at the south, where the corn is simply plucked and piled in covered stacks, leaving the husking for the less hurried portion of the year, the fall and winter months."

Cultivation of Barley.—T. C. PETERS, of Genesee county, inquired whether barley was deteriorating and likely to run out, as wheat had done in some portions of the State.

"Mr. GEO. CLARKE, of Otsego county, said that barley is an exhausting crop; the first and second years are generally good, but after that it fails.

"Mr. DANFORTH, of Cayuga, said he had raised sixty bushels to the acre, but last year his crop was not over ten bushels. The crop in his town was an entire failure.

"The Hon. GEO. GEDDES, of Fairmount, said he had had considerable experience in raising barley. It is a sensitive crop. It wants heavy soil, with a cold spring. This year has been the most successful for the farmers of this county he had ever known. The crops are all good. Barley is a very uncertain crop. He did not know that barley was an exhausting crop; had not experimented on the matter.

"Dr. WELLS, of Seneca county, said that large crops had been raised in his county this year. The northern part of the county is heavy clay soil.

"Judge ENOS, of Madison county, said that the barley crop in that county had been very poor for the last two or three years. He had raised fifty-six bushels of *Hess* barley to the acre, but now he got not over ten to fifteen bushels. It seems to have run out—does not even grow where the soil is good. Corn is a good crop to precede barley.

"Mr. HESS, after whom the *Hess* barley is named, said his crop was poor this year, and he should give up raising it.

"Mr. BROWN, of Wayne, thought that barley should not succeed barley. His soil is gravelly loam.

"Squire M. BROWN, of Elbridge, said he had good success in raising barley until within the last two years. The last year his crop was poor. He always sowed barley after corn. This year his barley weighs forty-six; it has weighed fifty-three. He sows plaster and salt on his corn, and cuts his barley rather green. Salt is good to use in manure. There was no weevil in his barley.

"W. A. MILLS, of Livingston county, said that barley had always been a crop with him. Three years ago he raised sixty bushels to the acre. Last year his crop was a failure—he only had eighteen bushels to the acre. The summer was, he thought, too hot for barley. He sows two bushels to the acre. His barley was raised on bottom land.

"Mr. C. WINEGAR, of Cayuga, sowed twenty acres last year, and got only fifteen bushels per acre. With him, in ordinary seasons, the crop never fails a good yield if the ground is in good order. His soil is loam. Prefers the four-rowed sort. Has raised good crops on corn ground. Seeds wheat land to a small sort of clover, and mows clover two years, then corn, wheat, and barley.

"Hon. GEORGE GEDDES—Our common rotation is two years grass and two years grain.

"Mr. DUNNING, of Cayuga, prefers two-rowed barley. It yields ten bushels more per acre than four-rowed. Our rotation is to manure sod and turn it under, and plant corn, which averages fifty bushels per acre of the eight to twelve-rowed variety. We depend much on the barley crop. It failed last year, on account of the wet season. In former years the crop averaged forty bushels; the last crop only twenty bushels, and we found maggots in the straw, and therefore do not use it for feed. We sow the spring variety of barley.

"GEORGE CLARKE, of Otsego, has always found barley straw good feed.

"Mr. DANFORTH, of Cayuga—We can't grow good barley upon clay soil.

"Hon. GEO. GEDDES, of Onondaga—Yet with us we use light soil for oats, and the most clayey land for barley.

"Mr. BAILEY, Kent county, Michigan—I grow barley on new land, and my crops have been eight, fifteen, and thirty bushels per acre. The two-rowed is best, and best soil good corn land.

"LEWIS MARSHALL, of Orleans county—I have sown winter barley in the spring, with good results. I sowed in March, upon land prepared in the fall, and got over fifty bushels per acre.

"Mr. N. GOWDY, of Lewis county—Barley does well with us if we turn a sod and sow peas and oats, and, after that, barley. It don't do well on sod. We sow in May, or first of June.

"Dr. VAN SLYCK, of Wayne county, said: Our barley crops were good until last year, which was very wet. I think barley more exhausting than wheat to the soil. Barley requires a strong soil, in as good order as for corn. He used to turn a clover sod, and plant corn, and follow with wheat and barley. Now we prefer to let the field lay in clover, and plow that under in the fall, then lightly spring plow, and sow barley, and get twenty or thirty bushels per acre. Turn under barley stubble and sow wheat, and get twenty bushels average per acre. Barley has fewer enemies than wheat. Seed clover with the wheat. If we sow barley after corn, we seed clover with it. Winter barley is the most popular, and yields thirty to fifty bushels per acre, and brings 12 cents a bushel more than spring barley. Clay soil is best with us for barley, and very good wheat land is good for barley. It should be sown Sept. 1, in drills.

"Mr. DOWNING—We sow wheat after barley and

seed with clover, and let that lay two years, and then turn under."

Distance for planting Corn.—J. J. THOMAS, of Cayuga, stated that the usual distance of planting corn was three and a half feet apart each way. A piece planted three feet by twenty inches *yielded one-third more than that planted the usual distance.* Hon. GEORGE GEDDES said: "Of course, corn will produce more, if planted thick."

In this section, we have seen corn injured by planting as thick as recommended by Mr. THOMAS. It did not ripen well.

Corn for Fodder.—The Hon. T. C. PETERS, of Genesee county, said:

"I sowed a plot of ground in drills with Ohio corn, for fodder, and obtained at the rate of nine pounds of green fodder per square foot of ground; and as there is over 43,000 feet in an acre, we should have about 400,000 lbs. on an acre. In drying, stalks shrink two-thirds."

This is over sixty-five tons of dry fodder per acre; but friend PETERS should know that such a method of estimating a crop is erroneous.

Plowing Land in the Fall, for Corn.—"S. M. BROWN, of Onondaga—I grow corn cheaper than I did fifteen years ago. I plow in the fall eight to ten inches deep, in gravelly loam. I mellow it in the spring with a cultivator, and do most of the cultivation with the same implement. I grew near 100 bushels per acre this year, and it wont cost me over ten and a half cents per bushel. I think farmers would do well to depend more upon corn. I manure by top-dressing with compost, using salt, plaster, and unleached ashes, with barn-yard manure. Muck is good, but I have none. I plant corn on green sward not over four years old. I consider the fodder equal to two and a half tons of hay per acre."

HEN MANURE FOR CORN.—O. W. BLAIR, of Oneida county, put six bushels of hen manure on two acres of corn—a tablespoonful in each hill. The manure was covered about an inch deep, and the corn planted directly over the manure. The crop was eighty bushels of shelled corn per acre. He says: "I think the hen manure made some twenty-five or thirty bushels of corn on the two acres."

LEICESTER PIGS.—Mr. BLAIR gives the weight of three Leicester pigs, butchered on the 27th of December, when eight months and twenty-two days old. They weighed respectively, 298 lbs., 320 lbs., and 340½ lbs. They had the milk of three cows, well skimmed, and about two quarts of corn meal per day till September; after that, corn in the ear about six weeks; then corn meal, all they would eat, till they were butchered.

FISH PONDS.—If N. H. C. will keep frogs in his pond, they will keep it clear of the so-called frog-spittle.—W.

EARLY VARIETIES OF WHEAT.

As before stated, in the August number of the *Genesee Farmer*, we expected samples of some of the earliest varieties of wheat raised in Virginia. FRANK G. RUFFIN, of Richmond, who kindly consented to aid us in this matter, informs us that he has written to many friends and acquaintances, but has only heard from one of them. This is JOHN F. WILEY, U. S. Marshall, Eastern District, Va. The variety of wheat raised by Mr. W. is the *Early Connor*. We annex a cut of it (fig. 1), together with some extracts from Mr. WILEY's letter to Mr. RUFFIN:

"I commenced my harvest on the 2d of June, which is some eight or ten days earlier than I recollect ever to have commenced harvest before. The grain, as you will perceive, is small, but of good quality, and very heavy. The lands in my immediate neighborhood are not regarded as favorable to the growth of wheat. I have not yet cleaned my wheat, but my neighbor, Mr. WM. M. MILLER, who cultivates the same variety, makes, the present year, ten bushels from one seeded, on thin land, without guano or any other fertilizer, which I regard as a very good yield. I regard it as a hardy, good-branching wheat, the only objection to it being its liability to injury from spring frosts, on account of its forwardness. You ask if it is not the same as the old *Red May* wheat. I am decidedly of opinion it is not. It has a stronger straw, branches more, grows taller, and ripens earlier, than the *May*. Notwithstanding its liability to injury from spring frosts, I think this objection more than counterbalanced by its exemption from the ravages of joint-worm, chinch-bug, &c., the injury resulting from these causes to this variety in my neighborhood being scarcely perceptible, while all other varieties have been much injured, and in some instances almost entirely destroyed. A striking instance of its exemption from injury from these pests is afforded in the crop of my friend and neighbor Mr. THOS. P. CARTER. He obtained of me, last fall, some eighteen or twenty bushels of wheat of this variety, which he sowed on a tobacco lot; and immediately adjoining it, on a part of the same lot, and at the same time, he sowed the *Woodfin* or *Polish* wheat. The *Connor* was entirely exempt from the ravages of the joint-worm, while the

FIG. 1.

Woodfin was almost entirely destroyed, not yielding, he thinks, one peck to the bushel seeded. I have cultivated both the *White* and *Red May*, and I think the *Connor* preferable, being more productive than either."

Fig. 2.

We are indebted to LEVI BARTLETT, of Warner, N. H., for samples of three varieties of early wheat, together with descriptions of them, which will be read with interest. We deem this subject of such importance that we have procured engravings of the ears so obligingly sent us by Mr. B.

"THE EARLY JAPAN (fig. 2).—Brought from Japan by the late Commodore PERRY. It seems to prove a very hardy and early variety, coming into blossom about ten days earlier than any other variety I have experimented with. It is a red wheat, and probably will not yield the whitest grade of flour; but its earliness and hardiness will offset for this defect. The four years I have been experimenting with it, it has not been injured by the midge, rust, or smut. The heads are short, yet I have shelled from 55 to 60 grains from a single head.

Fig. 3.

"THE EARLY NOE (fig. 3).—Obtained from France a few years since, by the Patent Office. You will see that it is an open-headed, thick-chaffed variety, the head differing much from most other varieties. It has the thickest, hardest, and heaviest straw of any wheat that I have ever examined. From this I infer it will bear high manuring without liability to lodge.

"TUSCAN WHEAT (fig. 4).—Received at and distributed by the Patent Office. With the seed came a certificate signed by a number of Michigan farmers, certifying that this variety had been cultivated there nineteen years, without ever being injured by rust."

Mr. BARTLETT adds:

"There never has been, within my recollection, any winter wheat grown here till seven years ago. Since then it has been considerably grown by many of our farmers; and when properly cultivated, it has generally done well. I have grown it for the five or six years past, and successfully too. Some four weeks ago, I took a short excursion about the town, and saw from seventeen to twenty fields of winter wheat. Most of them were extremely good.

Fig. 4.

"You write that you are 'deeply interested in this subject.' So am I. I have no hesitation in saying that, with the same population, in this and other of our towns, there is more *wheaten bread* eaten in one month than there was in the whole twelve forty or fifty years ago; and most of the flour from which this bread is made, is brought from the South and West. To pay for this *heavy import* of flour, causes an immense draft upon the purses of our people; while, with a little more skill, energy, and knowledge in wheat-culture, by our farmers, this evil might be greatly abated.

"Judging from my knowledge of the wheat-midge, which extends back some thirty years, your farmers who think the midge has *passed over* will yet find themselves sadly disappointed. If five years' experience gives me any right to speak in this matter, I will just say, with good culture, suitable soil, early sowing, (that is, in this section, from the 20th of August to the 10th of September,) farmers may pretty safely calculate upon fair crops of wheat—even crops of your best white wheats."

REFUSE OF TANNERIES.

AT a late meeting of the Farmers' Club of Little Falls, New York, the subject of using the refuse of tanneries (hair, fleshings, lime, &c.) for agricultural purposes, was discussed, and one member stated that he had used hair on grain and grass with the most perfect effect. He had spread it thinly and harrowed it in with the spring wheat, and produced the best crop he had ever raised or seen in the neighborhood. Upon grass its effect has been very distinct and lasting. Applied upon the top of an unproductive dry piece of land, it had produced a very luxuriant growth, and without any other application, the dark green complexion of the sward had scarcely abated in ten years.—*Scientific Amer.*

WE have repeatedly called attention to the great fertilizing value of the refuse hair, scraps of hide, &c., from the tanneries. When free from impurities, hair and dry skin contain as much nitrogen as the best Peruvian guano. They are not so readily decomposed, and do not act so rapidly, but they are more lasting.

CIDER AND CIDER-MAKING.

The apple crop in this section, the present season, is more abundant than it has been for several years. In other sections, however, the crop was destroyed by the great June frost, and good apples command good prices, not only for home consumption, but for shipping to the Atlantic cities and to the Western States and Canada. It is, of course, far more profitable to sell cooking and eating apples than to convert them into cider. But notwithstanding the general introduction of good varieties of the apple, there are still thousands of orchards the fruit of which is too sour to be advantageously fed to hogs or cattle, and too poor to eat or cook, but which makes good cider, and is profitably used for that purpose. Indeed, it is thought that this natural fruit makes better cider than ordinary grafted varieties.

The usual process of making cider in this vicinity is, briefly as follows: The apples are allowed to get as ripe as possible; they are then picked up and taken to the cider-mill, where they are allowed to lie in a heap for a few days, to "sweat." This accelerates the ripening processes. They are then rasped or ground into pulp. The pulp is often immediately pressed; but if the weather is cool, and the apples not quite ripe, it is better to let the pulp remain in the vessel for a few days. This gives the cider a higher color, and is believed also to change some of the starchy or woody matter of the fruit into sugar.

The next operation is to press out the juice. This is a simple process, but requires some skill. Four boards, about six inches wide, are nailed together in a square, the size it is desired to make the "cheese." This is placed on the bottom of the press, and a little straw is put inside, with the ends extending about a foot all around. The pulp is then scooped upon the press, inside this rim, forming a layer about six inches thick. The straw is then turned over it, and a little pulp put on it to keep it down. The rim is then lifted, and four sticks are placed on the layer of pulp, for the rim to rest on. Some more straw is then placed all around, and another layer of pulp added as before. This process is repeated till the "cheese" is as large as desired—say 75 bushels of apples. Sufficient straw must be used to prevent the pulp from being pressed out at the sides; but with good straw (rye straw is best) and proper care, a small quantity only is needed. Sometimes the straw is wet with water; but this weakens the cider.

A considerable quantity of cider will flow from the "cheese" before it is pressed at all. After it is settled somewhat, a very slight pressure is applied, which is gradually increased. If pressed too much at first, there is danger of the pulp bursting out at the sides. After pressing it as much as possible, and the cider has ceased to flow, the pressure is taken off, and the corners of the "cheese" are cut off with a hay-knife and the pomace laid on the top of the "cheese," when the pressure is again applied, and the cider will again flow freely. As soon as it ceases, remove the pressure and cut off four or five inches of pomace from the sides of the "cheese," place it on top, and apply the pressure again until the "cheese" is quite dry. Some, instead of cutting off the corners first, cut all round at once.

The cider is usually put in barrels at once, and sold while sweet. Eight to ten bushels of apples will generally make a barrel of cider. The price paid for the use of the mill and press is 12½ cents per barrel, when the farmer finds his own team and hands; or 25 cents when the mill-owner does the grinding and pressing himself.

This is the old-fashioned method of cider-making. We have now portable mills, which can be worked by hand, with a pressing apparatus attached. We annex a cut of one manufactured by W. O. Hickok, of Harrisburgh, Pa. It can be worked by hand or horse-power, and is capable of making from six to twelve barrels of cider a day. It costs but little, and every farmer can have one of his own, and can make the cider, little or much, when convenient, and not have to draw the apples some distance to mill, and then "take his turn," and finally do up the work in a hurry.

Some writers recommend filtering the cider through sand and charcoal, to remove impurities; but if care has been taken to exclude all rotten fruit, it is, in our opinion, unnecessary.

There are a variety of methods resorted to for the purpose of arresting fermentation and keeping the cider sweet, such as putting a handful of well-powdered clay into each barrel; or two or three pounds of newly-burned charcoal, reduced to a powder, are added to each barrel of cider as it comes from the press. This makes it as black as ink at first, but it finally becomes remarkably clear. Others add a little mustard seed. Another method is to place a few gallons of cider in the barrel, and then a rag dipped in brimstone is attached to a long tapering bung; this is ignited, and the bung loosely inserted. After the brimstone is consumed, the barrel is rolled till the cider has absorbed the sulphurous acid gas. The barrel is then filled up with cider. The sulphurous acid gas, acting on the albuminous matter in the cider, arrests fermentation. The only objection to this method is that if too much gas is absorbed, it may prove injurious.

A much better method, and one which obviates this difficulty, is to have the sulphurous acid gas absorbed by lime. In other words, to put a little sulphite of lime (not sulphate of lime, or gypsum,) into the barrel with the cider. When the cider begins to ferment, the acetic acid formed unites with the lime and liberates sulphurous acid gas, and this immediately checks fermentation. The sulphite is nearly insoluble in water, and lies inert and harmless at the bottom of the barrel till it is needed. This is a very simple and effectual method of arresting fermentation at any stage desired. Of course, in all cases the cider should be kept as cool as possible, without allowing it to freeze; and the more effectually the air can be excluded, the better.

CULTIVATION OF WHEAT.

Editors Genesee Farmer:—If I am correct in presuming that your journal discusses, as well as advances, opinions in regard to agriculture, perhaps you would allow me to make a remark or two on an article in your August number, entitled "Cultivation of Wheat."

You say: "Wheat likes a firm, compact soil; and if left somewhat rough and cloddy, it is none the worse (*a*): and you advise shallow plowing (*b*). Now, the deeper you plow, (I am speaking, of course, of a good depth of soil,) and the higher the state of pulverization you arrive at, the greater will be the yield of grain. You seem to set a high value on English farming; and I give this as an opinion formed after having seen and traveled for years over the best farming lands, and been among the best farmers in that country. But, instead of harrowing in the wheat, as you advise, they plow it in (*c*). I am certain that deep plowing and, as much as possible, pulverizing the soil, will bring the greatest crops. If the season be dry, the roots, owing to the looseness of the soil, shoot beyond, and are not dependent upon, the *hot dust* covering the moist and rich soil which, under this system, supplies the plant with nutriment. Again; if the season be wet and cold, there is not so much danger of the plant suffering by the water standing around the roots. In fact, the loose soil is one large drain. Whereas, by shallow plowing, in a *dry* season, the wheat is burnt up, because the sub-soil is too hard for it to root deeper and obtain moisture; in a *wet* season it suffers from the cold and water penetrating and standing by every fibre. Why should not the soil be cultivated as deep as the roots will strike? I have detected fibres extending from the root to a distance of twelve inches from the surface of the soil, and some of my friends have found them at fifteen and eighteen inches distance. We can't always plow this depth, but we should do the most we can.

Now to the *looseness* of the soil. Lime is mostly used on heavy wheat lands in England. Is it as a manure? No. It is as a *rectifier*. It loosens the soil, pulverizes the clods, and enables the roots to expand themselves, and obtain what nutriment the soil *naturally* contains, which nutriment would not be available but by this pulverizing process (*d*). In the article, "Plowing *vs.* Spading" in the August number of the *Genesee Farmer*, Baron von Liebig says: "If the food of plants in the soil can not move toward the roots, it is evident that the roots must spread about and look for food." He advocates the spade. And why? It "*breaks*, turns, and mixes it thoroughly."

In wet, cold, and sour lands, you advise to plow into high ridges, and make deep, well-cleaned furrows. I agree with you on this point, except that I would advise it on all lands.

West Jersey, Ill., Aug., 1859. JOHN C. COPESTAKE.

Remarks.—(*a*) Is not that true? Is it not, as we said, "easy to make the surface too fine and smooth for wheat"?

(*b*) We did not "*advise* shallow plowing." We merely stated that "the best English wheat-growers seldom plow deep *for wheat*." Is not this a fact? It is hardly necessary, we hope, for us to say we are earnest advocates of deep plowing and thorough pulverization of the soil.

(*c*) We have seen seed wheat plowed in in England; but it is not at all the general practice. It is the exception and not the rule.

(*d*) If we are to understand from this that the value of lime is owing merely to its mechanical action, in rendering the soil loose, we must differ from our correspondent.

Is it well to Change the Pasture of Cows?—We had supposed that it was; but in the Report of the Committee appointed by the New York State Agricultural Society to visit dairy farms, it is stated that Edwin Pitcher, of Martinsburg, who has a dairy of eighty cows, "has but one pasture in summer for his cows (except about twenty acres for night pasture), which he deems preferable, as the cows are more contented, and do better through the season than when changed in their pasture." What say our correspondents?

SPIRIT OF THE AGRICULTURAL PRESS.

Sorgho injurious as Fodder.—The Marquis de Vibrave states, in the French *Journal of Practical Agriculture*, that although sorgho is not poisonous to cattle, yet he has observed, since he commenced feeding it to his cattle, that it reduces the quantity of milk given by the cows, one-half; and that it also has the effect of inducing sterility, when cows are fed regularly upon it.

Burning the Prairies.—A correspondent of the *Indiana Farmer* says that in very dry seasons the wet mucky spots on the prairies have in many instances been burned out to the depth of two feet; and that, instead of the result being a crop, next season, of waving pasture grasses, these spots have become overgrown with swamp willows, from three to ten feet high; and he strongly condemns the practice of burning such land, as mistaken economy.

Kidney-Worms in Swine.—The *Germantown Telegraph* says this disease may generally be known by the animal appearing weak across the loins, and sometimes by a weakness in one or both hind legs. As soon as these symptoms appear, give the animal corn that is soaked in lye of wood ashes or strong soap-suds, and at the same time rub the loins with turpentine. An Ohio farmer cures this disease by giving one ounce of copperas daily, for six or eight days, dissolved in warm water, and mixed with two quarts of corn meal and dish-water.

Alpacas in Australia.—By the *Sydney Morning Herald*, of June 13, 1859, we learn that the alpacas imported into Sydney, at so much expense, by Mr. Ledger, have finally been purchased by the New South Wales government for $75,000, and the sum of $5,000 per annum allowed for the expense of keeping them at the public domain till it is decided that they can be successfully acclimated and disseminated among the flock masters of that country with profitable returns. We believe there were 280 in the flock, and it is said Mr. Ledger has lost $35,000 by the operation.

Keeping Milk Sweet.—A correspondent of the *Homestead* found that, in sending milk to market, though it left the dairy perfectly sweet, it was often curdled on delivery to customers. To remedy this, the cans were covered with cotton cloth soaked in salt water. By this method the curdling of the milk was entirely prevented.

Old Radish Seed.—A correspondent of the *Prairie Farmer* says that radish seed that has been kept six years or more, will produce radishes of a better quality than new seed.

Management of Milk.—The *Homestead* says: The milk-room and dairy management have something to do with the production of butter, and thinks an improved style of milk-room would be quite as likely to increase the yield of butter as an improved breed of cows. There is much truth in this; though there is no reason why we should not have improved breeds of cattle as well as improved dairy-houses and more skillful management. In fact, they often go together.

Hogs fed on Acorns.—A correspondent of the *Country Gentleman* asks why hogs fed on acorns for weeks will not gain anything for the same length of time if afterwards fed on corn. Is such the case? He has killed hogs from the woods, and found that their insides were completely black. He attributes this to the astringency of the acorns.

English Beans.—Col. B. P. Johnson mentions, in the *Journal of the New York State Agricultural Society*, that Mr. Wainwright, of Dutchess county, has been raising English beans for feeding stock. His crop last year succeeded well, and this year it promises an abundant yield.

Brine poisonous to Animals.—The *Kentucky Turf Register* says a gentleman at Lawrenceport, Indiana, recently emptied brine from a pork barrel into the yard. A number of hogs, and also one horse, partook of it. The result was that the horse and seven hogs died in less than six hours after the barrel was emptied.

Charcoal for Fatting Animals.—The *Valley Farmer* advocates the use of finely powdered charcoal mixed with the food of fatting animals, especially hogs, once or twice a week. It says that it serves as a medicine, and is also extremely fattening, either in itself or by rendering the food more available by strengthening and stimulating the digestive powers. We can not believe that it is, in itself, nutritious.

Linseed Cake for Heifers before Calving.—C. S. Flint, in his new and valuable work, *Milch Cows and Dairy Farming*, says that heifers fed with a little linseed cake, in addition to their other fodder, for three months before calving, acquire a larger development of the milk vessels, and yield more milk afterward, than others fed as usual. He thinks cotton-seed cake would answer equally well.

Heaves in Horses.—It is said, in a recent number of an agricultural paper, that a quart of a decoction of smart-weed, given every day to a heavy horse, will cure the heaves. We doubt it; but there is no harm in trying.

DAIRY MANAGEMENT IN SCOTLAND.

Sir John Sinclair has stated that "it is supposed that the same quantity of herbage that would add 224 lbs. to the weight of an ox would produce 900 English gallons of milk." Now, if we reckon 6 oz. of butter to be the average weight obtained from a gallon of milk, we will get 337 lbs. of butter from the same quantity of herbage as was supposed to produce 224 lbs. of beef. If the hypothesis of Sir J. Sinclair be correct, there can be no doubt that it is the interest of the farmer to adopt the dairy system in preference to the feeding of cattle. But even granting that the difference between the production of beef and butter is not so great as stated by him, yet it is generally admitted that there is a considerable margin in favor of butter, particularly when we take into account the relative price of the two at the present time.

The importance of the subject being admitted, we may inquire shortly as to what kind of feeding is best adapted for producing the largest yield of butter. Aiton, in his *Agriculture of Ayrshire*, published about the beginning of this century, tells us that the winter food of the dairy stock at that time was the straw of oats, or, toward the muirish parts of the country, the hay of bog meadows, frequently but ill preserved. "For a few weeks after they calved, they were allowed some weak corn and chaff, boiled, with infusions of hay; and by way of luxury, a morsel of rye-grass or lea-hay once every day; and of late years, by some farmers, a small quantity of turnips in the early part of the winter, and a few potatoes in the spring, have been added." The effect of such feeding on the animals is apparent when they are turned out on the grass in summer; "many of them are so dried up and emaciated that they appear like the ghosts of cows, their milk vessels are dried up, and it is not till they have been several weeks on the grass that they give either much milk or that of a rich quality." The summer feeding was generally pasture; and though a much better system of feeding has been practiced throughout the country since the introduction of turnip husbandry, yet an approximation to that described by Mr. Aiton will be found in some of the upland districts.

Farmers have now, however, a great variety of food from which they can make a selection; and the problem to be solved now is not how a sufficiency of one particular kind of food is to be gathered together to keep the cows in life for a considerable period of the year, but rather what variety of food, or, better, what mixture of varieties, how much, and in what state (raw or cooked), will prove most profitable for the production of butter. The mainstay of the dairy farmer now as formerly in summer is grass; in winter, however, there has been a great improvement in the feeding of the cows, from the use of turnips and other roots, as well as many other substances, such as beans, draff or distillers' and brewers' grains, linseed and rape cake, &c. Even now in summer, in some districts, it is found advisable and profitable, where butter is wanted more than milk, to give the cows some nourishing food, in addition to the pasture, at the very height of the season. Draff and bean meal are the two substances more generally used in such circumstances.

If the production of butter is to be the main object of keeping a dairy, there are two things to which the farmer should pay particular attention: the kind of cows he keeps, and the feeding. When we speak of the feeding, we mean not merely the quality of food the farmer purchases, but of what is grown on his farm. It is well known that the grass and turnips on some farms will produce far more butter from the same quantity of milk than those grown on others. We have known cattle fed on turnips alone from particular farms made fat in the same time as similar animals fed on turnips with the addition of two or three pounds of linseed cake each per day, the treatment and housing of the animals being alike in both cases. Certain fields will give a larger proportion of butter to the milk than others on the same farm. A farmer, therefore, should be guided, not only by the locality, but by the farm, in determining what department of the dairy he should turn his attention to.

Without referring at all, at present, to the kind of cow most profitable for a butter dairy, we pass on to a consideration of the kinds of food that may be used most profitably for the production of butter. The great authority on this subject is Mr. Horsfall, who has laid the public under great obligations to himself for the publication of his experiments and views on this interesting question. His method of feeding is the following:

In May, his cows are turned out on rich pasture near the homestead. Toward evening they are housed for the night, when they are supplied with a mess of a steamed mixture, to be afterward described, and a little hay each morning and evening. During June, mown grass is given to them instead of hay, and they are also allowed two feeds of steamed mixture. This treatment is continued till October, when they are again wholly housed. After this they receive steamed food *ad libitum* three times per day. After each meal, cabbages are given, from October till December; kohl-rabi till February; and mangels till grass-time—the supply of each of these varieties of green food being limited to 30 or 35 lbs. per day for each cow. Four lbs. of meadow hay are also allowed after each meal, or 12 lbs. per day for each cow, and water is placed before them twice a day, of which they partake as much as they feel inclined for. The steamed food spoken of above consists of "5 lbs. of rape-cake, 2 lbs. of bran, for each cow, mixed with a sufficient quantity of bean-straw, oat-straw, and shells of oats, in equal proportions, to supply them three times a day with as much as they will eat. The whole of the materials are moistened and blended together, and, after being well steamed, are given to the animals in a warm state. The attendant is allowed 1 lb. to 1½ lbs. of bean-meal per cow, according to circumstances, which he is charged to give to each cow in proportion to the yield of milk, those in full milk getting 2 lbs. each per day, others but little; it is dry, and mixed with the steamed food on its being dealt out separately." This is certainly high feeding, but it is amply repaid by the results; for, while cows fed in the ordinary way seldom produce milk which yields more than 1 oz. of butter to every quart, Mr. Horsfall's milk gives upward of 1½ oz. for every quart. It is also an important part of his system never to allow his cows to fall off in condition. He considers the maintenance of the condition essential to a large yield of

milk. There can be no doubt of the soundness of this opinion. A cow low in condition can not give the same quantity of milk, as much of the nourishment of the food is drawn off to make up the condition of the animal. And when a very lean cow is put on rich food, it is some weeks before the full benefit of the food can be obtained in milk, for the reason stated above. Another useful deduction made by Mr. HORSFALL from his experiments is, that albuminous matter is the most essential element in the food of the milk cow, and that any deficiency in the supply of this will be attended with loss of condition, and a consequent diminution in the quality of the milk.

In Scotland, bran is not very often used as an ingredient in any mixture of food for milk cows; but it will be seen from the foregoing that it forms an important part of Mr. HORSFALL's mixture. Some time ago we came upon the following extract, we believe from the *Irish Farmers' Gazette*, which gives some valuable hints as to the use of different substances in the feeding of milk cows:

"In reading over the experiments on feeding in STEPHENS, a difference of opinion exists as to the comparative fattening qualities of linseed-cake, bean and other meal; and in the *Report of the Larne National Agricultural School for* 1853, 1 lb. of beans is said to be equal in fattening qualities to 30 lbs. of turnips, and nearly 3 lbs. of oat-meal. I tried the bean-meal one season, at the rate of 3 lbs. a day, boiled, for each milk cow, with mangel, turnip, and hay. By February one of them was fat, but I may say dry; and the others with about half the quantity of milk they had when commencing. I tried oatmeal for two winters, the same quantity in the same way, and each cow gave three times the quantity of milk and butter, and turned out full better the following summer. I tried the same quantity of yellow Indian meal last winter, and I think it good for both milk and butter. I tried bran for three winters, at the rate of 4 lbs. every night for each cow. It was equal to the oat-meal, while using, and my cows turned out better the following summer than on any other feeding. The bran not only keeps them healthy, and gives them a greater relish for their food, but there is some combination of qualities in it beyond what any writer I have seen attributes to it."

The state in which the food is given has also a great effect in the production of both milk and butter. We have observed more than once that the yield of butter and milk is never so great when we give cows boiled turnips, with beans boiled quite soft among them, as when they get the boiled turnips and the same weight of beans made into meal and mixed raw with them. Again, there is more milk, and no taste of the turnip in it, when the turnips are pulped and mixed with cut straw or chaff and fermented, than if the same weight of turnips are given whole and raw. In the *Journal d'Agriculture Pratique* we read a short notice on this subject, by M. LEJEUNE, a director of the Agricultural School at Thourout, in Belgium. The facts he reports are not to be regarded as experiments instituted to test any theory, but are merely extracted from his accounts, and show the importance of attending to the mode in which food is given to milk cows. In February, 1855, the milk of eight cows was selected for experiment. The cows were fed in the following manner: Each cow got per day 4.4 lbs. of meadow hay, 13.2 lbs. straw, 4.8 lbs. linseed-meal, 11.5 lbs. of beet-root, and a cooked mash consisting of 5.5 lbs. of turnips, 2.7 lbs. of beet-root, 1.2 lbs. linseed-meal, 3.2 lbs. of rape-cake, 1.1 lb. of grain dust, 1.1 lb. of mixed meal, about 1¼ oz. of salt, and 6 gallons of water. From this very watery diet a large quantity of milk was obtained, 16 quarts of which gave 1 lb. of butter. In the month of February, 1856, the calculation was made from the milk of ten cows, eight of which were those with which the observations were made in the previous year. The nutritive value of the food detailed above was calculated to be equivalent to upward of 30 lbs. of good meadow hay per head. The food given in 1856 consisted of oat-straw, beet-root, the meal of rye, oats, and buckwheat, linseed-cake, rape-cake, and the dust of wheat or bran, given in such proportions as to make the equivalent value of the day's feed equal to a little more than 31 lbs. per head of hay. None of it was cooked, and the beet-root was reduced to small pieces and sprinkled over the meal. There was not the same quantity of milk, but the proportion of butter was much larger, being 2 lbs. of butter for every 20 quarts of milk. The cows, with the exception of the food, were managed in the same way in both years, and there were more newly-calved cows in 1855 than in 1856.—*The Farmers' Note-Book in the Journal of Agriculture.*

JOHN JOHNSTON'S WHEAT CROP.

THE following extract from a private letter from JOHN JOHNSTON, of Geneva, N. Y., will be read with interest, and we hope Mr. J. will excuse us for publishing it:

"My crop of *Soule's* yielded over forty-one bushels per acre. It is all weighed, except the rakings, which got wet and sprouted, and are kept separate from the other. The field was summer-fallowed for wheat, and very highly manured, the fall previous, with rotted cattle and sheep manure. My red wheat—say twenty acres of it—I expect will go nearly as much, if the threshers are correct. This shows what dung does, as I have twelve acres of red at the extreme east of my farm that has not been manured in twenty-four years that only gave a little over thirty-one bushels per acre. Dung is the staff of life and that's the fact. The red wheat that is so good was on that twenty acre field that grew the large corn you saw. I always thought it the wosrt field I had for wheat; in fact, it never had a good crop of wheat until I drained it in 1843 and '44. The *Soule's* was on the *twenty-eight* acre field, the *second* field east of my house, where you a few years ago saw large clover, very highly manured the fall of 1857, intended for corn, but summer-fallowed last year and sown with wheat, commencing the 18th September last. I have always the best *Soule's* wheat, when sown about that time."

FOR SPAVIN.—Bin-iodide of mercury, five grains; lard, one ounce. Mix well. Rub the size of a white bean into the spavin once a day, until it produces a discharge from the skin. This application will reduce almost any hard swelling, even when it is of a bony nature.

FALL PLOWING.

EDITORS GENESEE FARMER:—In the northern sections of our country, in consequence of the short *spring time*, for preparing the land for our grain crops, corn, potatoes, &c., it is a matter of much consequence that everything should be done in the fall that can serve to lessen spring work, such as plowing green-sward, corn, and other stubble-grounds, intended to be sown with grain and grass seeds the succeeding spring. These matters are all ably treated upon in your quotation from the *New England Farmer*, written by Mr. F. HOLBROOK some years since. He says: "From the last of October to the middle or later of November is a good time for plowing land, preparatory to sowing or planting in the following spring." Upon some accounts this late plowing may possess some advantages over that of August or September plowing; the weather is cooler, and usually the farmer is less hurried with other labors of the farm. But it is the opinion of some of our best farmers, that inverted sod-land, turned over early in September, will produce better crops of corn, oats, &c., than the same land would if plowed late as the middle of November. Direct experiments have proven the correctness of the opinion in favor of early plowing. The reasons for this seem quite obvious. The vegetable matters of the green-sward, turned over in the warmer weather of August and September, will soon after begin to heat and decompose; gases of various kinds will be evolved and absorbed by the soil, if of a loamy or clayey nature, and they will mostly be retained for the use of the succeeding spring crops. Portions of the potash, lime, and other mineral ingredients of the soil will be liberated by the action of the carbonic acid, ammonia, &c., formed during the decomposition of the vegetable matters plowed in; but no such fermentation will be likely to occur in the soil of the November plowed land, and the rains and snows of winter will so compress the inverted soil that the decomposition of buried vegetable matters will be much less perfect the following season. Your remarks, that "the great error in fall plowing is in not plowing early enough," in my view, is to the point, and correct. Heat, air, and moisture, are all requisite for the decomposition of vegetable and animal matters. The early plowed lands have all these requisites, while the late plowed are mostly deprived of these necessary conditions.

However, all farmers can not do as they would like in these matters. Some must necessarily delay plowing till late; others may have doubts in reference to the correctness of our views. To such, we would simply suggest an experiment in early and late plowing of a field of green-sward. Farmers differ widely in their views in regard to plowing, beside those of early and late plowing, viz: as to the proper depth to which the plow should be gauged, as also in the width of the furrow-slice, and whether it should be completely inverted or left at an angle of 45°—that is, lap-furrowed. All these matters, in a measure, depend upon certain contingencies, and admit of considerable variation; therefore, farmers should experiment, and investigate for themselves, and not trust too much upon what this or that man may say or write.

Some of the farmers, whose farms border the Merrimack river, in this State, I think, practice a very judicious course of cultivating their alluvial and other deep loamy soils. I do not see how they can well improve upon their system of culture. The system pursued by the farmers referred to, is, with a strong team, to plow their sod-land in the fall, (some of them early in September,) to the depth of ten or twelve inches, some making use of the double or Michigan plow; for reasons, others prefer the common plow. The land remains as left by the plow till spring; then a wide harrow is run over the field, after which the manure is carted on, spread and plowed in to the depth of four or five inches, and again harrowed. This preparation makes the after culture, &c., very easy; the result is, a crop of sound corn, ranging for sixty to eighty bushels per acre.

The plowing of corn and grain stubble in autumn, for a succeeding crop of oats or other grain the following spring, has been recently practiced here to some extent. It saves time in the hurry of spring work, as the ground is readily prepared by the cultivator and harrow for the reception of the seed. The crops are thought to be equally good, if not better, than if the ground had been spring-plowed, and generally the seed can be sown earlier. For oats and barley, early sowing generally proves the most profitable. LEVI BARTLETT.

Warner, N. H., September 14th, 1850.

FEEDING BEES.

THOSE who keep an apiary should be particular in examining their hives sometime in the month of October, to ascertain if there is a sufficient stock of honey to carry the bees through till the May following. No hive of bees can be successfully wintered over on less than from 15 to 20 lbs. of honey; and strong, large families, will require more. The bee-keeper should be able from experience, to know, on examination, whether his hives contain a sufficiency of honey or not. Hives that have been occupied several years, contain a large amount of old comb and bee-bread, and will weigh as heavy, without honey, as those that have been used one season will with honey in them; therefore, in such cases, an allowance must be made for this extra weight. Where a deficiency is found to exist in the stock of honey, it becomes necessary to supply it by artificial feeding; which is usually done during the latter part of autumn, or the beginning of winter. Sometimes, however, it is found necessary to carry on the feeding process through the entire winter. This feeding of bees is generally looked upon as one of the greatest difficulties attending their management, and rather than put themselves to so much trouble, many apiarians suffer their bees to perish, although the cost of such feeding does not amount to one-tenth of the value of the bees. It is seldom that more than one or two families out of ten or twelve in an apiary require feeding; but still, it may happen that the entire apiary need it. For this purpose, small feeding-troughs of tin may be placed at the rear of the hives opposite to the ordinary entrance, the side of the trough resting against the hive; the trough to be about the length of the hive, four to six inches wide, and two in depth, or of just such a size as will be sufficient to contain a day's supply of food for the hive; the trough to be nearly filled with syrup,

made by dissolving sugar in water till it is of the thickness of honey, and heating it to boiling, and then carefully skimming off all impurities. The syrup of the Chinese sugar cane, when it can be got, is admirably adapted for feeding bees. When the syrup is placed in the trough, a thin perforated float of maple, or some hard wood, that will just fill the tin and settle down with the food as it is consumed, is to be placed on the top of the syrup, for the bees to alight on, and feed themselves through the interstices, without danger of getting stuck on the syrup. A few small holes are now to be made through the hive, just above the edge of the trough, to enable the bees to get to their food, and as a means of attracting them to it a little syrup may be sprinkled on the inside of the hive, close to these holes, and also on the top of the float. The trough is to be covered over with a coarse wire gauze, that will prevent all access to the trough except through the hive, and through which the trough can be replenished from day to day, without removing the trough, or disturbing the bees that may be feeding. Over the whole is to be placed a small box, to keep the light out, and prevent rain, cold, &c., from penetrating. Some people think it too much trouble to heat the syrup, and are contented to give the bees only sugar and water; but this is done under a mistaken idea, and proves the ruin of bees so fed. The water evaporates in a few days, and the sugar becomes crystalized in the cells, so that it is of no more use to the bees than so much stone, thus destroying every cell it hardens in for any further use. J. M.

GLEANINGS BY A YOUNG FARMER.

Sucking Cows.—Several years ago, I had a young cow which persevered in sucking herself in spite of all the rigging I could contrive to prevent her, and the only way I succeeded in stopping her was to tie her up in a stall so narrow that the sides of it would touch her sides, and feeding her plenty of corn meal until she was fat enough to butcher, and then butchering her. Last spring, I had another likely three-year-old heifer, that had just come in for the first time, commence the same vicious habit. Remembering my former ill success in preventing mechanically, I determined to appeal to her *taste*, which I did by smearing the teats night and morning with soft grease, and then dusting them thoroughly with pulverized cayenne pepper. After continuing the applications about a week, they were discontinued. The cure was perfect, she never having repeated the offence, up to the present time.

Kicking Cows.—I have no difficulty in breaking the most *vicious kicker*, by *Rareyizing* them, *i. e.*, tying up one fore leg. They will not attempt to kick but once, for in so doing they will throw themselves.

The Apple-tree Borer.—This pest of the orchard is becoming more and more destructive every year. Young orchards, especially upon gravelly ground, left to themselves are almost sure to be ruined in from one to three years. I have been experimenting to prevent them for the last six years, some of the time killing more *trees* than *grubs*. I have at least ascertained, to my entire satisfaction, that there are several articles not good for trees, be they ever so good to kill the grubs. Experience is a dear school, but it is called a good one. Spirits of turpentine, when applied to apple and peach trees, I *know* will kill them; also, unleached ashes, when placed in contact with the bark of the apple by being piled around them. The peach appears to stand the latter. I had observed that trees upon a clay soil were much less infested than when upon a gravelly one. I thought by drawing the earth away from the roots of my trees, which are upon a very loose gravelly soil, and piling around them a small mound of clay worked up into a soft mortar, to place them in as favorable a condition as though they stood upon a clay soil. The result proved me to be mistaken. Instead of being an advantage, I found my trees never contained as many grubs before, many of them having a dozen each. This was caused by the shrinking and cracking of the clay as it dried, forming a small space between it and the bark, into which the insect could crawl and deposit its eggs. The bark, by being kept moist, was very soft and in excellent condition for them to flourish. I have settled down upon the following plan, which I am confident will prove successful: In the spring, I draw all the earth away from the body of the tree quite down to the roots, and dig out with a pen-knife all the grubs I can find, and then apply the following mixture with a paint brush, for a foot or eighteen inches above the ground: Plug tobacco, one pound; aloes, four ounces; water, two gallons; steep down to one gallon, and add one gallon of soft soap, and stir well. This should be applied in the spring, again the last of June and first of September, each time looking closely for grubs, which should always be removed with the knife, as this will not, nor will any other wash, eradicate them after they are once hatched. It should be used to prevent the insect from depositing their eggs upon the bark, and to destroy them when they are deposited, before they are hatched.

The Bark-louse.—I have succeeded in freeing a number of young trees that were wonderfully infested with the bark-louse, by washing with strong soap-suds and tobacco-water, applied as warm as the hand could bear, using a woolen rag and rubbing each branch separately. The warm water softens up the woody scales so that with a little rubbing the bark will be perfectly clear of them. I have often tried weak lye, but found they would stand any number of applications. The rubbing with hot suds is slow but perfectly effectual.

Cameron Mills, Steuben Co., N. Y., Sept. 2, 1850. S. M.

We shall be happy to receive some more of such "gleanings" from our correspondent. Eds.

Heaves in Horses.—A correspondent asks for a cure for heaves in horses. I will send you one that a friend of mine gave me some time ago, which he says he has tried to his satisfaction and thinks it a certain cure, and I believe him to be a man of veracity. If you think best, you can publish in the *Farmer*. One pound of antimony, half a pound of sulphur, half a pound nitre, one-fourth pound rosin; powder fine and mix together. Give a horse half a tablespoonful twice a week, mixed with his food. I can not vouch for the above, not having tried it.—Henry Cox, *Wheatland, N. Y.*

COARSE vs. FINE-WOOLED SHEEP.

Editors Genesee Farmer:—In your July number, page 208, Z. B. S., of Fairfield, Ohio, (what objection can gentlemen have to using their names?) in writing under the head of "Fine vs. Coarse-Wooled Sheep," says: "I have kept both kinds, and, as far as my experience goes, am greatly in favor of the fine-wooled, provided they are of the right kind. I kept through the winter, one year ago, thirty-one sheep of the French and Spanish cross," * * * "which sheared me 6 lbs. 11 oz. per head (on an average) of clean washed wool, that sold for 40 cts. per lb., while coarse wool sold for from 25 to 30 cts. My sheep were provided with (what I consider indispensable) good shelter, racks under cover, and fed with corn, oats, and wheat bran, in equal parts, half a bushel per day, and watered regularly. Now, if any one can show a greater profit from the same number of coarse-wooled sheep, I hope they will give us their experience."

I do not know if the Cotswold would come under the class of coarse-wooled, for theirs is the wool muslin-de-lain is made of; but I am familiar with the other breeds, (fine and others,) from breeding and otherwise, and am a breeder of Cotswold sheep, and import always the winners of the high prizes of the Royal Agricultural Society of England, to insure having the best. I will not draw a comparison between the pure-bred Cotswold and his fine-wool, (though Z. B. S. instances his pure-bred,) because pure-bred Cotswolds are too scarce and costly for slaughter—and the only fair way to calculate the profit for farming purposes, is for mutton and wool,—but will give the advantage to the fine by only calculating the *part-bred* Cotswold. I have never sold the Cotswold wool under 30 or over 40 cts. per lb., and that is fully as high as any fine wool will sell here. I consider the wool pays for the keep. I credit it with no more; and the Cotswold wool will, on the same keep, give *at least* as much money *to the fleece* as the fine wool. Z. B. S. claims 6 lbs. 11 oz. Allow 7 lbs., which, at 40 cts., gives $2.80. Now, if I could make no more than $2.80 per head for the whole year's keep, and feeding half a bushel per day, in the winter, of corn, oats, and bran mixed, to thirty-one sheep, besides hay, I certainly would not raise them for *profit*.

I always have some part-bred ewes to raise muttons from, and sell the lambs from such, the fall of the year they are one year old, not one for less than $10 each to the butcher, and have sometimes sold them for $25 to $35 each. I have been offered $50 each for the two-year-olds, and have been offered $100 each to keep a lot to three years old, and feed them. A gentleman bought of me three wether lambs (two of them twins) to raise and feed for a Philadelphia butcher, who gave him $250 for the three. One of them weighed 234 lbs., and the other two 204 and 192 lbs. net;* and the butcher was so pleased with their turn out, that he presented the gentleman with a silver pitcher additional, worth $25. The thorough bred in England have been brought to 430 lbs. gross, 320 lbs. net. Gentlemen in my county who have only the part-breds, never sell their muttons under $8 each (except a few for $6) the summer and fall they are one year old from grass, never having fed grain at all at any time; and this is of every year's occurrence. Butchers come here from Washington City, Baltimore, Philadelphia, and New York—from 100 to 300 miles. The farmer never drives them one mile; and rarely, if ever, is there one mutton in this county as old as two years. This is one of the profitable advantages of this breed of sheep. They sell higher—much higher—at one year old than other breeds at four; and a man need never be overstocked—the butcher is always ready for any surplus. They are almost always muttons, it being their peculiar trait to take on fat.

Now let Z. B. S. make his own calculation as to the profits of the breeds for *farming* purposes, *i. e.*, for mutton and wool, not for breeding purposes, and see the difference. He made his thirty-one sheep at $2.80 each—$86.80. Mine would have brought in lambs alone, independent of the wool, $310, (my wool brought at least as much money to the *fleece* as his,) allowing my ewes brought only one lamb each, as did his; but it has been proved in a court of record, that "twenty Cotswold ewes brought and raised, in one season, sixty lambs;" and an agricultural society has had it proved, to its satisfaction, that "eleven Cotswold ewes brought twenty-eight living lambs. Five of the eleven brought sixteen lambs—one of the five brought four, and the other four brought three lambs each." Both so unusual as to be remarkable.

My sheep have a common straw shelter, that they may go in and out at pleasure. If snow is on the ground, I have a rack under the shelter, for hay. Occasionally, while snow is on the ground, I give them a little offal and salt. Water is in the field. I rarely give them offal or grain of any kind. What would they not be, if I were to give them, as Z. B. S. does his, "corn, oats, and wheat bran, in equal parts, half a bushel per day"?

In the experiments of Z. B. S. with long-wools, could he have had "the right kind" of long-wools, or long-wools of pure blood, or long-wools at all?

JOSIAH WM. WARE.

Berryville, Clarke Co., Va., July, 1859.

* This is nearly 40 cts. per lb. for the mutton. Butchers will sometimes pay exorbitant prices for prize cattle and sheep, to exhibit to their customers. But in instituting a comparison between the relative advantages of keeping different breeds of sheep, it is hardly allowable to take such unusual prices as the basis of calculation, or even to allude to them as an argument in favor of a particular breed. Our correspondent, too, leaves out of the question the fact that such large sheep as the Cotswolds will consume more food than smaller breeds. EDS.

To cure Scab among Sheep.—Take four pounds tobacco—best natural leaf; extract the juice. One pound corrosive sublimate, half-pound sal ammoniac, one pound sulphate zinc, half-pound arsenic, one pound red precipitate, three quarts spirits turpentine. Dissolve the precipitate, arsenic, and corrosive sublimate in the turpentine; the balance dissolve in soft water. Procure five barrels of soft water. First add the solution in water; stir and mix well; then add the solution of turpentine, adding the amber. The whole should be about 90° Fahrenheit. Dip the sheep in the liquid; wash and rub well until thoroughly saturated to the skin. Keep the sheep under shelter, if done in cold, damp weather. This will effect a permanent cure in a short time.—Edward Kinley, *Salem, Iowa.*

DO SHEEP DETERIORATE IN THE QUALITY OF THEIR WOOL IN WARM CLIMATES?

EDITORS GENESEE FARMER:—President FANNING, of Franklin College, Tenn., remarks, in the *Southern Homestead:*

"The effect of a warm climate is to thin out and shorten the fibre, lighten the fleece, and take the wool from the limbs and under portions of the body, and substitute rough, hairy locks, particularly about the hips, neck, &c. In higher latitudes, sheep are more compact and uniform in the fleece over the whole body, and the yield is perhaps double that of southern flocks."

Now is all this true? Hardly, I think, to the extent the Professor would lead us to believe. Where do the finest and best wools come from? Is it not the hot and dry climate of Australia, of Cape Colony, and of the plains of Estramadura and and Saxony? Is it not generally the case that the fine-wooled sheep, if removed to a colder and damper climate, such as Great Britain or the northern States of America, are apt to have their wool deteriorate and become coarser, from the united effects of external moisture, the want of green and succulent food, and the confinement during our long and severe winters? Would not the same amount of care and attention expended on a fine-wooled sheep in the ever green pastures of Australia result in the production of a larger and finer fleece than is obtained from the same animal in Vermont? What would be the quality and quantity of wool obtained from a sheep in Vermont, if it were to have to shift for itself all the year round, exposed to the wet and cold, and subsisting on the driest of hay or a cold bite of frozen grass? Do the fine-wooled sheep in Australia, Spain, or Saxony, yield a less average weight of fleece than those of Vermont or Ohio, of an equality of fineness? Is there not a great difference in the profit of keeping 1000 sheep in the former at the same expense as 100 in the latter? Is not the want of green food in winter, such as turnips, one of the causes why sheep, when removed to our cold northern climate, have a tendency to yield wool of a coarser fibre and longer staple?

Will some of your correspondents give us their views on this subject? M.

THE INSECT ON MULLEINS NOT THE WHEAT-MIDGE.—I have to-day been examining, with a microscope, the small yellow worm which infests the mulleins, and which has been supposed to be the larva of the wheat-midge. But I think that it is not this larva, though at first sight it closely resembles it. Its color and size are exactly the same, but it moves about much more actively, and the microscope reveals that this larva has several long legs, which the larva of the wheat-midge has not, and a sharp pointed tail, and two horns or antennæ from a very projecting head, which it moves from one side to the other. Now the larva of the wheat midge has scarcely any perceptible motion at any stage of its existence, (and it has long ago passed into the pupa state,) nor are there any marked distinction between its two ends; both are similarly rounded off, and there are no antennæ.—E. M., *Ancaster, C. W., September* 8, 1859.

WEATHER, CROPS, &c., IN MAINE.

EDITORS GENESEE FARMER:—No rain fell in the month of August up to the 25th, when we received a refreshing fall of eighteen hours continuance. The number of days drouth was fifty-two, or from July 3d till August 25th. The monthly mean of heat for August at this place, lat. 44 deg. 22 min. N., long. 69 deg. 6 min. W., was 70°. This was obtained from observations made by myself at the hours of 7 A. M., Noon, and 6 P. M. The warmest day was the 5th—mean 81°; the coldest, 30th—mean 59°. The weather for September, up to this date (Sept. 7th), has been cool. Vegetation suffered severely in consequence of the drouth, but partially revived under the influence of the moisture. Grain has been harvested in good order; the crop is remunerative; principally oats and barley. Wheat, rye, and buckwheat, are grown to a limited extent. Potatoes have as yet escaped the rot and rust. Many fields are to be seen perfectly green and growing, exhibiting a striking contrast with former years, when the tops were black—dead with rust—long before this time of the year. The absence of rust can only be attributed to the lack of moisture—foggy weather—of which we have been most entirely free the past season. Throughout the whole State, fruit is entirely wanting. Corn has revived, and will be quite a crop. The grasshoppers in some sections are very destructive, sweeping whole fields of potatoes, turnips, carrots, etc.

Belfast, Me., Sept. 7, 1859. G. E. BRACKETT.

MANAGEMENT OF HOGS.

EDITORS GENESEE FARMER:—A very good way of keeping stock hogs through the winter, is to have a sufficient quantity of sheaf rye stacked at some distance from the barn and away from other animals, as hogs do best where they are not annoyed. The rye can be fed in the sheaf. One sheaf per day for each pig that is nine months old is sufficient. It is better for them thus than in any other way, as they masticate it better, and it is easily digested. They should have a field to run in, with a good supply of fresh water. A small quantity of salt may be laid by the water, where the pigs can have ready access to it. Last season, I wintered my swine on sheaf rye, and I never had any look better.

In wintering hogs, people err in keeping them in stys for weeks, and even months, without changing their bed. Mine lie scattered through the straw, and look clean and healthy. They work the straw over, and have it in good condition for plowing under in early spring. If young pigs are kept at home in winter, it is best to put the mother in the sty, and give them a fresh bed of straw every week, and let them also have air and exercise on warm days. Wean them at the end of seven weeks, and then feed them with scalded Indian meal for the first six weeks after. JOHN EWING.

Benton, Holmes County, Ohio, 1859.

THERE are truths which some men despise, because they have not examined them; and which they will not examine, because they despise them.

TO PREVENT HENS EATING THIER EGGS—Give them a piece of raw meat, about once a week, to peck at.

NOTES FOR THE MONTH—BY S. W.

THE SOIL AND CLIMATE OF MINNESOTA.—The editor of the *Lake City Tribune*, a practical farmer and a gifted western editor, says that corn in his garden, planted on the 24th of May, and only one foot high on the fourth of July, was seven feet high on the 24th of July. When I first landed, in 1814, at Dunlap's, north of Sheldrake Point, Cayuga Lake, N. Y., I was astounded at the growth of Indian corn growing there. The soil was so well divided by vegetable matter, that I could pull out the large corn roots, a foot or more in length. I did not again visit those fields until twenty years afterward. Then the soil was so worn down by cereal cropping, that it had changed from a corn to a wheat soil; and it was solely indebted for its present vegetable matter to recent crops of clover plowed into the calcareous loam. At that early day, such beech, maple, and basswood land brought great corn and great wheat straw; but while the cereal yield of corn was perfect, the wheat was shrunken. Then the oak lands, common to both sides of the lake, except this particular locality, brought the finest of white, thin-skinned wheat, with the least possible tillage. The oaks were girdled, the brush burned, and the wheat harrowed in; and kind nature gave the increase, as God in love and mercy ever favors the poor who help themselves.

But methinks Minnesota is not altogether indebted, for her corn-growing success, to the vegetable matter in her soil; her climate must be much less capricious than ours, as no twenty consecutive days in July in this region ever gave six feet altitude to Indian corn, no matter how well suited the soil might be to the growth of the corn plant. I had sweet corn fit to boil on the 8th of August, planted on the 4th of May. It grew more than four inches some days; but then a few cool days, or a cold northeast rain storm, would keep it a week in abeyance. Yet we had some hot, corn-growing days in May, when corn grew fast in proportion to its then slender roots; and at that time the region about Lake City was chilled below corn-growing by the ice in Lake Pepin. I hope the editor of the *Tribune* will consent to keep a diary of the weather there, for the benefit of his outside readers, and publish it, as he does much other valuable information.

SILICATE OF LIME.—The best farming and general amendment of the soil, at the smallest outlay for manures, is undoubtedly in Eastern Pennsylvania. Red clover is there the principal meadow crop, and lime and clover their principal manure, always including that of the stalls. Many farmers there have lime-kilns on their farms, and every farmer uses lime without stint on his clover lays and fallows, where organic matter is not exhausted. As lime is not needed in any quantity as an ingredient of the plant, it has been supposed that the office of lime, thus liberally applied to the soil, is to dissolve the woody fibre, and other matters in the soil, into available plant-food. But the late discoveries of Prof. WAY, corroborated by still later experiments of EICHHORN, give another and not less important value to lime in the soil, to wit, that the silicate of lime alone has the power of attracting *ammonia from the air*. (Vide leader in the August *Farmer*.) At the well-wooded North Manitou Island, last summer, I was astonished, in common with every other farmer passenger, to see such millet, potatoes, and corn, growing, almost without manure, in a very loose, coarse, and nearly white sand. The proprietor attributed the fertility of the soil solely to the lime it contained. The beach was covered with boulders and pebbles of nearly white magnesian limestone, including those of quartz, feldspar, &c., but no stratified limestone was *in situ*. May it not be inferred that the fertility of this soil of drifting sand and boulders is due to the presence of the silicate of lime in the soil, and to the affinity of lime-silicates for atmospheric ammonia? In no other region that ever came under my notice did such tall, large beeches and maples grow on a soil so poor in the aluminous principle and vegetable matter. The extreme transparency of Lake Michigan in this region proclaims the aluminous poverty of the soil.

THE BEST FOOD AND TREATMENT FOR HENS.—A late agricultural paper recommends azote as a very necessary ingredient in the food of laying hens. Azote is the French for nitrogen; and as a laying hen is constantly contributing nitrogenous food for man, in her eggs, it is indispensable that she should be well fed with both vegetable and animal food. Linseed meal, being the richest of all vegetable food in azote or nitrogen, I have found to be a great promoter of egg-laying. It should be mixed with scalded meal or shorts, or with sour milk. In this way it is a good substitute for animal food, or the insectivora that hens are deprived of when confined to narrow quarters. I have found that there is no food hens like so well as Indian corn, and it is also the cheapest grain for their food. A pint of corn will go as far in feeding hens, besides being better relished, as four times its bulk in made dishes. I have found, on trial, that a small yard is a worse prison for hens than a larger stable with a basement, where the floor is dry earth. The continued moisture from rain in an open yard soon makes the whole surface redolent of excrements, whereas a barn floor may be sanded and kept sweet and dry. With sand to roll in, hens may be confined under cover the whole season. Half an hour before sunset they should be let out to range over the yard and garden. They will then be too busy picking grass, gravel, &c., to scratch and do mischief, being always in a hurry to return to roost before even twilight begins. Hens thus kept will more than twice pay for their keeping, if not too old to lay well. Two or three days' imprisonment in a coop will break up Black Spanish hens from sitting, and they soon commence laying again, if well fed. It is only profitable for a villager to raise a few early chickens to renew his laying stock, as chickens are great and increasing feeders, eating, when half grown, twice as much as an old fat hen. Among the grasshoppers of the farm chickens are more profitably grown.

Waterloo, N. Y., August 11, 1859.

FOR CAKED BAG OR GARGET.—Strong tincture of iodine, half a drachm; lard, one ounce. Mix well. Rub the hardened or inflamed parts of the udder well twice a day. If there is much heat and redness, it is better to paint the part twice a day with strong tincture of iodine (two scruples to an ounce of alcohol), and bathe with whiskey two or three times a day; and when the heat is reduced, use the ointment.

THE DESTRUCTION OF OUR FOREST TREES.

Eds. Genesee Farmer:—I have often thought of the reckless destruction of our forests, and our utter carelessness about cultivating timber. True, some look into the future, and leave a part of their forests for future use; but the majority go with headlong haste to destroy their timber, as if in a hundred years none would be needed. But few reflect that posterity may need timber for building, fencing, fuel, &c.; and not a small number think there is a sufficiency for their time, and that their posterity may look out for themselves. This is truly ungrateful to the Creator. God made the earth, with its fulness, for all his children; and those who fail to make provision for the coming generations, or who destroy that already made for the accommodation of all, through all time, do not fulfill their duty.

Even in the States of Ohio, Kentucky, and Indiana, which once abounded in timber, there are many places where timber is already scarce; and yet to endeavor to impress the propriety and necessity of cultivating timber, would be thought ridiculous. One man, to whom I made the necessity of timber-culture quite apparent, replied, or rather defended himself against my arguments, by saying, "My neighbors would laugh at me!"

It must be apparent to any reflecting mind, that, should the present rate of consuming timber be continued, and no efforts be made for its re-production, many districts will, at no distant day, be sadly in want of the article. The vast consumption by steam alone, should rouse us to a different course.

I am pleased with friend Bement's thoughts on the Oaks of New York, in last year's volume of the *Farmer*, and hope that he, and others of similar views on so important a subject, will speak more on the culture of timber, in the *Genesee Farmer* and other public journals.

For the encouragement of those who think of the subject, and to whom the practicability of raising timber may be a problem, let me say that in my boyhood I roamed over districts in Stark Co., Ohio, where I could see from one to fifteen miles over plains (so-called) without any timber but scions of a year's growth, and on many spots not a sign of anything but grass, and on the hills (Stark is hilly in some parts) many acres quite bare of timber. But now, not over forty years later, there are dense, beautiful—delightfully beautiful—groves of timber from fifteen to forty feet high. Could those who think the culture of timber a chimera have seen these plains and bare hills, and now behold the enchanting groves of oaks, hickories, &c., they would be astonished, and be induced to plant acorns and nuts, or at least not laugh at those who would engage in timber-culture.

In the same county (Stark), I saw sprouts on chestnut stumps, not over fifteen years old, that afforded eight good rails to the lower cut. The scions or sprouts of chestnut grow, the first few years, faster than those from the seed; but it is a luxuriant-growing tree, and should be planted wherever the soil is congenial. Not only its useful timber, but its excellent nut, should give two-fold inducement. The black or native locust should be extensively grown, its timber is so durable and therefore valuable. It is of rapid growth, and the sprouts are easily transplanted. The white pine and red cedar should command our attention, not only for their valuable timber, but for beauty and shelter. At Forlorn Hope, Stark county, Ohio, are white pines, transplanted about twenty-five years since, fifty feet high, and twenty inches in diameter at two feet above the ground. Also, spruce, red cedar, and tamarack, from twelve to fifteen inches in diameter.

A. BARR, JR.

Pipestown, Berrien Co., Mich., 1859.

HUNGARIAN GRASS.

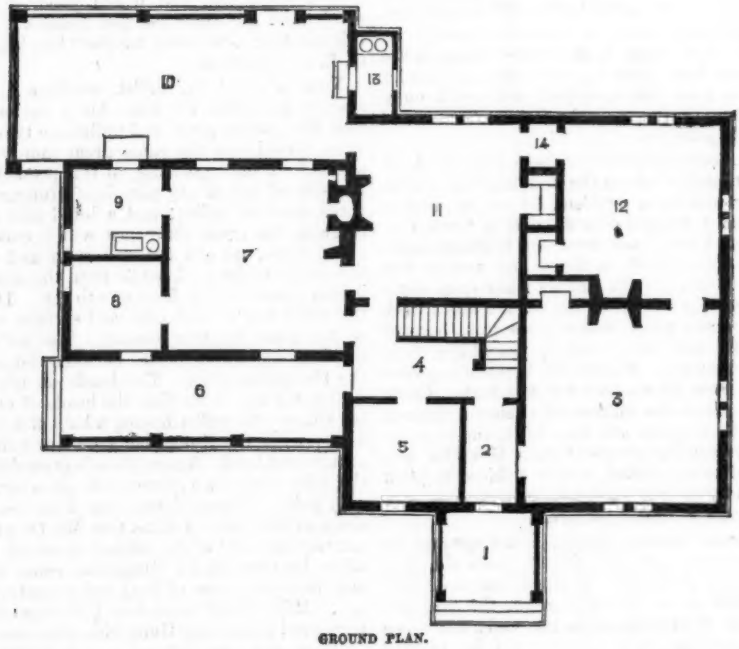
Editors Genesee Farmer:—In the August number of your paper I find an inquiry from G. E. B., of Belfast, Me., asking if Hungarian grass is a species of millet, or a "humbug." One portion of this query I can answer. Most assuredly it is not a "*humbug*." In the month of June I sowed fifteen acres of Hungarian grass, in no less than seven different portions of our farm, and of course on different varieties of soil, &c. We have Hungarian grass, sown on the 17th day of June, that now stands over four feet high and just as thick as it can possibly stand; and I have no doubt that from three of our parcels we shall get at least four tons per acre of dry fodder. Certainly, in the present scarcity of hay, it will prove a most profitable crop; and I have not a particle of doubt that if sown in this latitude as late as the 20th day of July, it would mature sufficiently to make most excellent fodder, as that sown by us on the 20th of June is now heading out, and would yield, if cut now, much more hay than the best meadow I have seen this summer. So much for the "humbug" part of G. E. B.'s question.

Now as to it being millet, we have A. B. Dickinson's *ipse dixit* for that; but I beg leave to say that Hungarian grass and millet are two very distinct varieties of the same great family of forage plants.* I have growing, at this present time, by the side of one of our parcels of Hungarian grass, three acres of millet; and a blind man could distinguish the great difference which exists in the two. First, we get but one stem and one head from each millet seed, while from the seed of Hungarian grass we get from one to ten. The leaf of the millet has a rough edge and surface, while that of the grass is quite smooth. The millet grows much stronger and shorter between the joints than the Hungarian grass. The heads do not resemble each other any more than the heads of oats resemble wheat—the millet having a long, flat, branching head; while the Hungarian grass has a short, compact, round head. Again, there is great difference in the color of the two plants while growing; and the only point of resemblance that I can see, is in the shape of the seed. I think that Mr. Dickinson was entirely ignorant of the subject on which he wrote, when he pronounced Hungarian grass the millet and barn-yard grass of forty and seventy-five years ago. Millet itself bears but little resemblance to barn-yard grass, and Hungarian grass much less.

Detroit, Mich., Aug., 1859. C. WOOD DAVIS.

* G. E. B. asks if Hungarian grass is a *variety* of millet. Our correspondent admits that it is. We understand A. B. Dickinson to claim nothing more than this—that Hungarian grass is a *variety* of millet. Eds.

DESIGN FOR A COUNTRY HOUSE.



GROUND PLAN.

DESIGN FOR A COUNTRY HOUSE.

Mr. Harney's designs for houses, three of which have already appeared in the *Genesee Farmer*, have, we believe, given very general satisfaction. The houses are well arranged, and there is a home-like look about them which commend them to the attention of all about to build. If there is any fault, it is that they are too expensive for the majority of

farmers. We should be glad if some of our readers would furnish us a few designs for cheaper houses.

This month we present a design, by Mr. HARNEY, for a bracketed country house of two and a half stories. It consists of a main body and an L. The main house is square in plan, and measures 36 ft. on each side; the L, containing the kitchen and its offices, is 18 ft. by 26, and one story and a half in height. The disposition of the several apartments of the house is as follows:

The front entrance porch, No. 1, opens into a vestibule, No. 2, 5 ft. by 9. From this vestibule we enter the parlor, No. 3, which is 18 ft. square, and contains a good-sized closet. At the further end of the vestibule, a door, the upper panels of which may be glazed, opens into the staircase hall, No. 4. This hall contains stairs to the chambers above, under which is a flight leading to the cellar, and opens into the following rooms:

No. 5, office or library for the master of the house, so situated as to be convenient to the door opening upon the recessed veranda, No. 6; No. 7, kitchen, 16 ft. square; No. 8, store-room, 7 ft. 6 in. by 8 ft.; No. 9, pantry, 8 ft. square, containing pump and sink, and leading into the private yard, No. 10; this yard is to be enclosed by a lattice fence 7 ft. high.

No. 11, living-room, 15 ft. by 16, containing a large closet, and communicating, by means of a passage way, No. 14, with the family bed-room, No. 12. No. 13 is a privy opening into the enclosed yard.

The second story contains three large chambers and a child's bed-room, besides the hall and several closets in the main body; and a servants' bed-room, a large clothes-press, and a bathing-room in the L.

The third story, or attic, furnishes room for three large bed-rooms and numerous closets.

CONSTRUCTION.—This house is to be constructed in the same manner as those we have before offered, namely, vertical boarding and battens for the outside covering, and plain finish, with walls prepared for papering, for the interior. All the lower windows of the main part are to be shielded by hoods* 12 inches wide. The roof projects three feet all around, and is supported on plain 3½-inch brackets. Height of first story, 10 feet; height of second story, 9 feet.

The cost of the above house would be from $3,300 to $3,500.

* In Mr. HARNEY's design there are two skylights, for partially lighting the attics. These, and the "hoods" over the lower windows, mentioned above, do not appear in the view, having been omitted by the engraver.

ORNAMENTAL BEE-HOUSE.

SPRINGSIDE is a fancy place, and all the buildings are of a fanciful order. The lodge is a gem in its way. The family cottage, the gardener's cottage, the conservatory and grape-house, the carriage-house and stables, the dairy, ice-house, and poultry-houses, are all models of beauty. A bee-house seemed to be wanting to complete the arrangements.

There are various modes of housing the hives. Some are very ornamental, and may be scattered over pleasure-grounds and gardens, in the form of grottos, temples, etc., and thus unite ornament and use. PHELPS, in his *Bee-Keeper's Chart*, says: "Much more depends upon the location of the apiary than most bee-keepers appear to imagine; and even among those who have the preference, there are different opinions on the subject."

"If we keep bees for ornament," says QUINBY, "it would be well to build a bee-house, paint the hives, etc.; but as I expect the majority of readers will be interested in the profit of the thing, I will say that the bees will not pay a cent toward extra expenses; they will not do a whit more labor in a painted house than if it was thatched with straw." Notwithstanding this high authority, we were determined to erect one to correspond with the other buildings on the premises. It was the wish of the proprietor to have something fanciful. Architectural, agricultural, and various works on bee-culture, were consulted, without finding anything to suit our purpose. After sketching various forms and plans, the one figured at the head of this article was finally adopted. It is something of the Gothic style of architecture, and is considered a beautiful specimen of an ornamental bee-house.

The style and external form is pretty well delineated in the foregoing sketch. Each wing is 10 ft. long and the front posts 9 ft. high, the rear ones 8 ft. The tower is 6 ft. square—the same width as the two wing rooms, which extend into the tower, making the length of each room 16 ft. Inside, against the front wall, are two shelves, one above the other, extending the whole length, sufficient to accommodate twenty of Phelps' patent hives.—Shelves are also placed in the upper part of the tower, suitable for six more hives. The sides are of inch-and-a-quarter plank, tongued and grooved, and battened. The floor is of hemlock boards, and

the roof of shingles. There are two glazed windows—one facing the west, the other facing the north. These windows, when opened, and the holes under the roof, give a complete circulation of air, so necessary for the comfort of the bees in the heat of summer. The hives are placed against the side, with a tube three inches wide and half an inch deep projecting through, for the egress and ingress of the bees. By this arrangement, the bee-keeper can examine the hives without molestation from the bees.

As this building is situated, one wing faces the east, the other the south. This gives the bees the influence of the sun in the morning, or fore part of the day, when it is beneficial to them; and during the middle of the day it will not be so oppressive as when the hives are unprotected by the front wall.

This is the second season since this building has been occupied by bees, and so far has met our most sanguine expectations. Our stock of bees has more than doubled, and we have had a good supply of honey.

Many suppose a miserable box, placed on an old board, and stuck in some dark, out-of-the-way corner, is all-sufficient; and even when so placed, they are discovered to be very profitable tenants. But these industrious little insects are worthy of a better situation; and we think it will be found that the profit arising from them will increase in proportion to the care and attention bestowed.

Springside, N. Y., Aug., 1859. C. N. BEMENT.

PAINTING HOUSES.

THE *Rural Register*, a new and valuable agricultural paper lately started at Baltimore, says:

"Wherever a white house is set conspicuously, either on a hill or in a valley, it is a blotch upon the landscape, because it never harmonizes with the scenery around it. A white house with green blinds offends the very first principles of good taste."

This is too much the case; and it is much to be wished that our rural friends would show a better appreciation of the effects of color, by subduing the too glaring white of their houses, which is easily done by mixing a few pounds of some color with the white, when painting or whitewashing the outsides of their residences, that will render it of a more neutral tint, such as stone gray, salmon color, or light brown. UVEDALE PRICE, a good authority on this subject, is thus quoted by DOWNING:

"When the sun breaks out in gleams, there is something that delights and surprises, in seeing an object, before only visible, lighted up in splendor, and then gradually sinking into shade. But a whitened object is already brightened up; it remains so when everything else has returned into obscurity; it still forces itself into notice—*still impudently stares you in the face.* An object of a sober tint, unexpectedly gilded by the sun, is like a serious countenance suddenly lighted up by a smile; a whitened object, like the eternal grin of a fool."

There are some cases where this sweeping condemnation is not so applicable, such as where a house is so embowered in foliage that but little of it is seen.

SHOULD YOUNG DUCKS BE ALLOWED TO GO TO WATER.

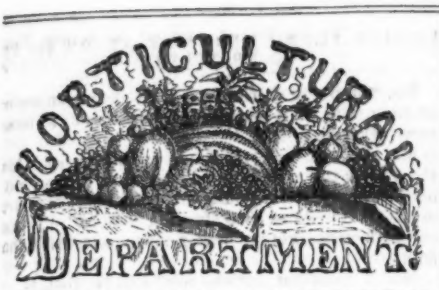
EDITORS GENESEE FARMER:—Did you ever know an animal to be misled by its instincts? If not, how happens it that the mother duck takes her young (and, to her, precious) charge direct from the nest to the nearest pond? If it *is* "decidedly injurious" to allow a young duckling to get into the water for a week or two after it is hatched, I think the expectant mother would have selected some spot remote from the water to have deposited her eggs and spent her anxious weeks of incubation.

Limerick, N. Y., Aug., 1859. E. MAYNARD.

REMARKS.—Our correspondent is evidently inclined to be facetious. We merely stated a fact which we had learned from experience. We find, however, that we are not alone in advocating that young ducks should be kept from the water for some time after hatching. C. N. BEMENT says: "Ducks, when first hatched, are always inclined to fever, from their pinion wings coming out so soon. This acts upon them as teething does on children. They should therefore be kept from everything that has a tendency to give them a sudden chill. To prevent this, we always give our young ducks as little water as possible. In fact, they should only have enough to allay their thirst, and should on no account be permitted to play in the water." BROWNE says: "The ducklings are no sooner hatched than the mother takes them to the water, where they dabble and eat at the very first, and *many of them perish.*" This author strongly recommends that ducks' eggs should be placed under hens, as he says the young ducks have then a chance to get hardy on dry land, before they take to the water. LOUDON, than whom there is no better authority, recommends confining them in a coop for a week or two before they are allowed to go to the pond.

Instinct no doubt leads the old duck to the water, as being most congenial to herself; but it does not give her the power of reasoning from cause to effect; and where animals are brought under man's control, for his benefit, their instincts must submit to be controlled by his superior reason. EDS.

SAVING CLOVER SEED.—Many farmers are deterred from saving clover seed for their own use, from the great trouble and expense of hulling and cleaning it. But in this section it is a common practice to sow the seed and chaff together, which is done by making a large, deep box of boards, on the top of an ordinary wagon box. The chaff is then shovelled in and hauled out to the field, and scattered over the surface from the waggon, as evenly as possible, with a straw or dung fork, just thick enough to give the ground a dark appearance. It is then harrowed in with a light harrow.—J. M., *Woodhouse, C. W.*



T. G. YEOMANS' PEAR ORCHARD.

On the first of September, in company with Messrs. Hooker, Littles and Seelye, of this city, we had the pleasure of visiting the farm of the Hon. T. G. Yeomans, of Walworth, N. Y.

Mr. Yeomans is well known as an enthusiastic cultivator of fruit, especially of the dwarf pear. The village of Walworth evidently owes much to his arboricultural taste. Shade trees abound. The streets are lined with them—Maple, Elm, Horse-chestnut and Lindens, with here and there, in the gardens and grounds, a fine Norway Spruce, Hemlock, or other evergreen. What a beautiful country this would be in ten years, if we had one such man in every town!

Mr. Yeomans' farm consists of one hundred and eighty acres. Of this he has one hundred and twenty-five acres in orchard. He has 3000 *Baldwin* apple trees in rows 20 feet apart, planted 40 feet apart in rows, in quincunx, with *peach trees planted between the apples.*

The peach trees will afford several crops of fruit before the apples come into bearing, and, being comparatively short-lived, they may be cut down without loss, when the apples trees are large enough to occupy the whole ground. Mr. Yeomans, too, finds them beneficial in breaking the force of the wind.

The apple and pear trees are trained with long stems, (apples 5 to 6 feet, peaches 4 to 5 feet high,) so as to admit the free use of the plow and cultivator. Mr. Y. is decidedly opposed to the system of low training. The land under his apple and peach trees is as clear and mellow as a summer-fallow.

But it is of his Pear orchard we designed particularly to speak. Eight years ago he set out 3000 *Virgalieu* pear trees, 120 *Duchesse d' Angouleme*, and one to three trees of about thirty other varieties. They were all dwarf trees, that is, they were all worked on the quince stock. They were planted 10 feet apart each way.

The *Duchesse d' Angoulemes* have succeeded admirably. They occupy a little less than one-third of an acre. In 1857 they produced about eighteen barrels of fine fruit, which were sold at $14 per barrel — $252, or $756 per acre. In 1858 (a poor pear season) they ripened seven barrels; one barrel of which was sold for $25, and the rest in New York, at $17 per barrel — $127, or $381 per acre. The crop on these trees this year is very fine, and, at a low estimate, will be from 15 to 20 barrels.

These trees have been pruned thoroughly, but otherwise have received no extra care or cultivation. They are not trained as low as is usually recommended for dwarf pears, and the cultivation is performed almost entirely by the horse-hoe or cultivator. The trees have not been manured, and last year the land was planted with beans, which produced twenty-eight bushels per acre. This year no crop is grown between the trees, and the land is kept free from weeds and in admirable condition by the use of the cultivator. Trees which annually produce from $381 to $756 per acre may surely be allowed to occupy the whole land.

The 3000 *White Doyenne* or *Virgalieu* trees, planted at the same time and in the same field as the above, grew well, but the fruit was attacked with the disease known as "cracking of the pear." This disease (undoubtedly caused by a fungus) has attacked this variety for many years in different sections of the country; but except in a few cases, and in particular sections, little damage has been done by it in Western New York. In this neighborhood, the present season, the *Virgalieu* is very fine. But with Mr. Yeomans it "cracks" badly, both on the dwarf and standard trees. He concluded, therefore, to bud over all his *Virgalieu* trees principally with *Duchesse d' Angouleme*, and a few *Bartlett's* and *Flemish Beauties.* This he did in 1855. They have done well, and the trees now look vigorous and healthy, and this year are bearing some fruit, affording good specimens. Of the thirty varieties, one or two of which were planted the first season, none have done so well as the *Duchesse d' Angouleme*, the *Louise Bonne de Jersey* being perhaps the next best.

The whole land occupied with this pear orchard is eight acres. The soil is a rather heavy sandy loam. The land is high and apparently dry, but, to the surprise of many, who think all high land must be dry, Mr. Y. has thoroughly underdrained it. Such an orchard of dwarf pear trees we have never before seen. But for the cracking of the *Virgalieu*, it would by this time have been a great success. We trust this beautiful orchard will escape all further mishap, and that the whole eight acres will be as productive and profitable as the one-third acre of *Duchesse d'Angouleme* is now and has been for the past two years. We see no reason to doubt it.

FRUIT GROWERS' SOCIETY OF WESTERN N. Y.

The September meeting of the Fruit Growers' Society of Western New York was held at the Court House, in this city, September 22d. The exhibition of fruit was quite fine, especially of grapes. *Delaware* grapes were shown from the original vine in Ohio, by Messrs. Bissell & Salter; from Newburgh, N. Y., by Chas. Downing; from Onondaga county, by Jno. Lowe, ripened early in September; and in this county, by several gentlemen. *Hartford Prolific*, *Concord*, *Clinton*, and *Diana*, were also shown fully ripe. *Isabella* and *Catawba* were also exhibited which had begun to color. Messrs. Bissell & Salter showed some hot-house grapes; a *Black Hamburgh* bunch, weighing more than a pound and a half, and finely colored. A seedling from the *Clinton* was also shown by Wm. King, of a beautiful golden color, delicious flavor, and fully ripe. There was a fair display of apples and pears, with some melons and other fruit.

SUMMER PRUNING OF THE GRAPE.

After the usual formalities of organization, subject No. 1 was read by the secretary: "*Does summer pruning of the grape hasten the maturity and improve the quality of the fruit, and does it increase the size of the fruit?*"

A very full expression was made by the members, some being in favor of quite close pruning, and others preferring to allow quite free growth to the vine.

H. E. Hooker thought that very much depended upon the mode of training and richness of ground, whether free summer pruning was beneficial. If trained upon trellises, it gives improved size and quality to prune. They must not be allowed to become a mere swamp of vines. Grapes which are starved are not hastened in maturity, or increased in size.

Mr. Townsend, of Niagara county, said that summer pruning must not be carried to such excess as to force the fruit buds of next year into premature development.

Mr. Smith, of Onondaga county—Some say, let nature take her course. This is well, if we commence that way. If we commence differently, we must continue so. In the natural soil, without any pruning, the vine gives a pretty good crop, but perhaps not quite as large fruit; but when we commence with highly manured soil and high culture, we must confine the vine to trellises, and it *is* necessary to summer prune; and the only question is to what extent.

P. P. Bristol, of Livingston county—To let the grape vine grow entirely its own way, will give us the poorest specimens of grapes. The habit of the vine seems to correspond to all other plants, when wild, *i. e.*, to set more fruit than it is capable of maturing well. Dr. Underhill cuts back half the branches and thins out half of the bunches of fruit.

Mr. Herendeen, of Wayne county—The sap goes first to the leaves, and on its return flow reaches the fruit. We must not summer prune so severely as to injure the health of the vine.

Mr. Moody, of Lockport—With proper summer pruning, the buds may be developed so as to bear surely every year.

Mr. Ringueberg, of Niagara county, said his vines averaged sixteen pounds of fruit to the vine, planted in rows four feet apart, and eight feet apart in the row. After fruit has set, take off the ends of the bearing wood, leaving four leaves from the fruit.

Mr. Ainsworth, of Ontario county, had been led, by repeated experiments, to think summer pruning beneficial. His neighbor Wilcox thereby had large crops *ten* days before vines by their sides, which were not pruned, and of quality decidedly better. Wood is greatly improved by summer pruning, and much better prepared to stand the winter.

Mr. Bronson had experimented upon an *Isabella* vine in a favorable location. The unpruned vine kept growing till frost came, but did not have a single ripe grape; while the vines all around which were summer pruned, ripened their fruit well.

Mr. Hoag, of Niagara county, thought there was not much difference in the time of ripening; but judicious summer pruning produced a much larger crop.

GRAPES FOR GENERAL CULTIVATION.

Question No. 2.—"*Can any other varieties of grapes beside Isabella be recommended for general cultivation?*"

Mr. Hoag, of Lockport, thought highly of the *Hartford Prolific*, which ripened four weeks earlier than the *Isabella;* and when not grown in the shade, does not drop very badly from the bunch. The *Delaware* ripened with him 10th September, and was a better grape than any other. The *Concord* is a very fine grape; ripens after the *Hartford Prolific*, but is ten days or two weeks before the *Isabella*. The *Diana* ripens a few days after the *Concord;* a few berries on each bunch ripen very early, but they hang on finely, and all are sweet and fine flavored. He mentioned also the *Perkins* and *Rebecca*, and wished to hear other members as to the *Diana* and *Delaware*.

Mr. Barry wished to have the varieties tested thoroughly, and tried in vineyard culture, too, and to see if they prove in all locations hardy, productive, and to ripen early. The *Diana* possesses all the qualities that are required for a general, profitable, and popular grape. When ripe, it is of most delicious quality, and we can not be wrong in recommending it. No one can be sorry for having recommended the *Diana*. The *Delaware* is a most important acquisition. The *Concord*, he thought, is going to be a valuable grape, although nothing like so fine in quality. The *Hartford Prolific* is the earliest grape we have in our nursery, but it drops badly from the bunch. The *Northern Muscadine* is a little earlier, but drops worse. As yet would recommend only one variety, and that one is the *Diana*.

H. E. Hooker felt we must be guided by experience. The *Delaware* we shall find, no doubt, a desirable grape. It is so hardy and so productive. On my own premises it is now fully ripe. On the

same open trellis where the *Isabella* is unripe and unfit to eat, the *Delaware* is good. Certainly I should say it is a fortnight or three weeks earlier than the *Isabella*. *Hartford Prolific* is the earliest grape that I have ripened. For my own use, it is a very good grape. *Concord* follows shortly after *Hartford Prolific;* and though I can not praise it very highly, still it ripens a fortnight or so earlier than the *Isabella*. *Rebecca* I have no confidence in; its leaves burn so much in the sun. The *Diana* is a grape which I esteem very highly; a good deal better every year I know it. The fruit is very rich and delicious, and the vine is a great bearer.

Mr. HOAG, of Niagara county—The *Delaware* ripens with us about the 10th of September, and we esteem it superior to the *Diana* in every respect except the size of its berries. One of our two-year-old vines produced this year one hundred clusters of grapes.

Mr. MOODY—The *Delaware* is very valuable for garden purposes; but no farmer ought to set out an acre of it. The *Diana* is a strong grower, equally as hardy and a greater bearer than the *Isabella;* shorter jointed vine; more buds, and ripens earlier, and will hang on the vines to the end of the very longest season, without dropping.

B. HODGE, of Erie county—This is an important inquiry. With me, three-quarters of the seasons the *Isabella* does not ripen. It is poor, insipid, and worthless. There is now a sort of grape mania for some better grape. Hundreds and hundreds of seedlings will be brought forward, and the public mind is sensitive to know if we have any good varieties equal to the *Isabella*, and that ripen earlier. If we can get such, they will be valuable. People call the *Isabella* ripe as soon as they become a little brownish; but the *Isabella*, when fully ripe, is a dead black—as black as any *Concord* I ever saw.

Mr. BARRY would mention that old favorite the *Clinton*—small, but never drops, ripens early, and keeps till New Year's day. Is most easily propagated, will run and bear everywhere, whether pruned or not. If we ever turn our attention to wine-making, the *Clinton* will be the grape.

Mr. COVEY had kept the *Clinton* until the last of February; and the longer they were kept, the sweeter they were.

Mr. HOAG here remarked that the *Diana* was an excellent keeper.

Dr. MINER, of Monroe county, had raised the *Diana* for five years—five hundred and more vines. In same condition, upon same trellis, had found them produce as much weight as *Isabella*, but far better in quality and earlier in ripening. Never got a ripe *Isabella* in same locations were the *Diana* ripened every year, and quality was far superior. Had raised *Clinton* longer than *Diana*, but considered it worthless as a table grape, by the side of the *Diana*.

The Society then, by a unanimous vote, recommended the *Diana* for general cultivation in Western New York.

AFTERNOON SESSION.

PEARS FOR GENERAL CULTIVATION.

Question No. 3.—"*What varieties of pears have proved productive, and of good quality, in all parts of Western New York?*"

B. HODGE, of Erie county, spoke of the *Bartlett* in the highest terms. The *Flemish Beauty* is a most excellent pear. When picked early and ripened in the house, it is very delicious. In Buffalo, the *Steven's Genesee* has proved a very fine pear, and the *Seckel* is universally admired.

Mr. TOWNSEND, of Niagara county—The *Louise Bonne de Jersey*, as a dwarf exceeds any variety in productiveness that I have ever cultivated. The *Duchesse d' Angouleme* also, as a dwarf, is fine. The only fault I have to find with the *Vicar of Winkfield*, is its abundant bearing—bears so much that the fruit must be thinned. Among the new pears, I think the *Howell* promises to be one of our most valuable fruits. It is of large size, bright color, fine appearance, and of first rate excellence. The *Tyson*, where known, is a universal favorite, and an abundant bearer, either as a standard or a dwarf. As to the *Brandywine*, I don't know but that if I were compelled to select one variety, I should select the *Brandywine*. *Belle Lucrative*—any one who has ever eaten them, need not have a word said about them. *Osband's Summer*—every body that knows it will have it. Bears fine crops. I have only mentioned such sorts as I have tested from six to ten years, and have invariably found them to be of the very finest quality.

Mr. AINSWORTH, of Ontario county—The *Tyson* is a very fine pear; bears a full crop, and is a hardy tree. The *Bartlett* is very fine, and the tree bears young. The *Flemish Beauty* has one fault, and that is, that it sometimes rots at the core. *Belle Lucrative* is very fine and sweet. The *Seckel* has succeeded in our section well. Mr. DIXON had the first tree near us, and it has always borne each year. Don't think there is any tree will excel them as to quantity (unless perhaps *Bartlett*), and its fruit sells for $16 per barrel. The *Virgalieu*, at Canandaigua, and in the Wyoming valley, does not crack; fruit very fine, and sells at $22 per barrel. Trees bear very full. *Louise Bonne de Jersey* has done well with me. I have a tree now twelve years old with a barrel of pears on it. The fruit is one-third larger on dwarf than on standard trees.

Mr. BARRY thought this question was a very difficult one to decide. We need trees that are hardy, productive, and free from blight; and my opinion is in favor of the *Duchesse d' Angouleme*, *Louise Bonne de Jersey*, and *Bartlett*. The *Virgalieu* in one place in our grounds all cracked one year, and next year they did not one. Notwithstanding all the failures, I still regard it as one of the best we have. It will sell at an enormous price—twice that of any other. I would not leave it out. *Beurre Giffard*—fine, if gathered early. *Doyenne d' Ete*. *Rostiezer* does well everywhere, and does not crack. *Tyson* is a superb tree, and is worth growing for its beauty, while its fruit is one of first quality. *Flemish Beauty* is another of the No. 1 varieties. *Howell*, *Belle Lucrative*. *Beurre d'Angon* keeps a month longer than the *Virgalieu*. The *Sheldon* is one of the finest of all pears, and a native of Western New York, beside; fruit most delicious. Although it wont grow on quince, it is a superb grower on pear. For winter pears, I would recommend two—*Lawrence* and *Winter Nelis*.

H. E. HOOKER—The list of pears is so good—unexceptionable, in fact—that I can not add to it.

(*To be continued.*)

PLANTING TREES, &c.

MANY of our readers are no doubt expecting this fall to plant fruit trees, ornamental trees, shrubs, &c., &c.; and a few words at this time, which we shall say to you, may be of assistance to some who have not had much expreience in dealing with trees.

Taking it for granted that those who have ordered trees of traveling agents have satisfied themselves that they are, through them, dealing with honorable and responsible nursery firms, and not with those who merely make it their business to buy trees and vend them again, and who seldom visit the same neighborhood twice, and are utterly irresponsible; in the first place, when the trees are delivered to you, examine them for yourselves, and see if they are healthy and sound. This you will have no trouble in determining. Any one can satisfy himself of the condition a tree is in, if he will attend to it. Is the bark sound and green?—the roots, when they are cut, are they of a clean lively white? If so, your trees are alive; and if otherwise agreeing with the terms of your contract, give the nurseryman you deal with the credit of performing his part, even should you afterward lose them. At the time of delivery, the responsibility of the nurseryman to you, in reference to your purchase, ceases; and failures after this time you must attribute to yourself, your soil, climate, or some other causes, and not blame the man that has raised the trees.

We allude to this point now, because, nurserymen are often reproached, and suffer unjustly.

If you reside in a very severe northern climate, it may happen that before your trees reach you they may have been exposed to frost. If so, let them remain packed, and put them in a cellar where they will gradually thaw out, and afterward plant or heel them in. If by some delay on the route they are somewhat dry, you need have no fears of losing them; they may be even so dry that their skin is much shrivelled, and by burying them up completely, three or four inches under ground, in the course of a week or ten days they will become as fresh as if just dug. If you receive your trees in time, and have prepared land for them, plant as soon as received; but if the land is not in a suitable condition, set them in the ground temporarily, or "heel them in," as it is technically called, until you have had time to thoroughly prepare your land in the spring.

Of the preparation of the soil for trees, we do not propose to speak, assuming that every one who plants a tree, with the expectation of its living and thriving, will see that his land is both rich and dry, either naturally or artificially, and well worked up.

One remark is applicable to all our fruit and deciduous ornamental trees, when about to be planted. If you desire them to make a healthy and vigorous growth, cut back all the limbs severely. Often you may even take off every limb and twig to advantage, especially with apple, peach, and plum trees. Cherry and pear trees, cut off every limb within six or eight inches of the body. The beauty of form of ornamental trees and shrubs is also greatly promoted by this close pruning at the start. If this operation is neglected, expect only the worst results. The young tree, excited by the warmth of the spring-time sun, expands every bud, and unfolds so large an extent of leaf-surface that every drop of sap is exhausted before the ground is sufficiently warm to quicken the roots into action to supply the waste which is going on. After a few inches of wood has been made, growth entirely ceases for the season; and if left to itself, this state of things often continues to exist a number of years. We have watched trees—and have no doubt you can call up similar instances—that actually appeared to grow smaller, and, relatively to vigorously growing trees, this was true of them. The evil we have here spoken of is a great impediment to tree-culture, and is the cause of a large proportion of the failures of trees. Having properly pruned the top of the tree, now examine the roots, and you will always find, to a greater or less extent, broken and bruised roots. Cut off these injured parts clean and smooth, and your tree is then in fit condition to plant.

In holes dug large enough to afford the roots ample room, and to permit the tree to stand as deep or a trifle deeper than originally, place the tree and fill in a few inches of fine soil, and then pour in a half pailful or so of water, and work the roots about in the mud until it has settled close about every part, when the remainder of the dirt may be filled in to the level of the ground. If the tree is left now, although what you have done has been well done, many accidents may yet befal it. The winds of fall, winter, and early spring, are usually fierce and destructive; before spring they will have shaken it a thousand times to the extremity of every root, and perhaps caused it to work itself loose in the ground, with a hole all around the trunk, so that the roots have been partially frozen in this way. Every tree, therefore, as soon as planted, should be staked, so that there will be no possibility of its being swayed by the wind; or a mound of earth, one and a half or two feet, may be raised about the tree, which will answer the same purpose as the stake, and also prevent the

tree from being thrown out of the ground by the freezing and thawing in early spring, which frequently proves very destructive before the mischief is discovered.

When trees are staked and not banked up, they should be examined frequently in early spring; and if the roots are found exposed by the action of the frost, they must be immediately covered.

Roses planted in the fall, in the more northern States and Canadas, however hardy they may be supposed to be, should be slightly protected by straw or coarse litter thrown loosely over or bound about them.

Late planting of strawberry plants seldom is successful, and should you have ordered some choice varieties to come with your trees, plant them nicely in a box of sandy earth, and place them in your cellar in the light of a window. Sprinkle lightly for a few days, until they have accustomed themselves to their situation, and then withhold water entirely during winter, unless you should find the soil getting very dry, when it may be given sufficiently to keep the soil slightly most. In this way you may preserve the plants until you can put them into the ground in the spring.

Many of the new hardy grape vines are grown by the nurserymen in pots, and sent out with the balls of earth attached. When planting such vines, shake out all the dirt, and spread out the roots in the hole.

These general directions may be of benefit, if followed, and may also suggest to some many other attentions which can be profitably bestowed on young trees.

PLOWING OLD ORCHARDS.—How many old orchards there are that have been seeded down and the land suffered to lie in grass till the trees produce cracked, gnarled, and worthless fruit—and little of that. Such orchards should be plowed—and as deep as may be, without disturbing too many of the roots. The present month is a good time to perform this labor. The earlier, the better. Fall plowing and summer-fallows are as good for fruit trees as for any farm crop. Do not neglect this. It will *pay*—pay double, and treble.

PRESERVING DAHLIA ROOTS.—Take up the roots on a dry day, after the tops have been killed by frost. Let them remain exposed to the sun and air till quite dry. All the soil should be shaken off them. When quite dry, put them on a shelf in the cellar, or in a box or barrel of dry sand. The name of the variety should be written on a wooden label, and attached to the root with wire.

PEAT, SWAMP MUCK, &c.—These substances—containing, as they do, in the dry state, some 70 per cent. of organic matter—are of great value to the horticulturist. They are most beneficial on dry sandy soils, which are often deficient in organic matter. It is well known that these substances not only supply plants with food, but also render the soil more retentive of moisture. Nearly all garden vegetables require more carbonaceous matter in the soil than wheat and other cereals. The same is probably true of fruit trees, and especially of many kinds of evergreens.

The best way to prepare swamp muck, peat, &c., is to throw it up to dry, and then compost it with horse-manure, and with rich, animal substances, that ferment rapidly. The ammonia developed by the fermentation of these substances neutralizes the acid of the muck, and a valuable manure is the result. When it is not convenient to do this, a little lime or ashes may be mixed with the muck, in order to neutralize the acid and induce fermentation.

DWARF PEARS.—We understand that Mr. PINNEY, of Clarkson, N. Y., has *Louise Bonne de Jersey* pear trees, on the quince, seven years from planting, some of which produce this season three barrels each. He estimates his crop of *Louise Bonne* at three hundred bushels. He asks $6 a barrel for them. Mr. P. has embarked extensively in the culture of dwarf pears; and we are glad to hear that he is so well satisfied with the results, on the whole, that he is about to set out more trees. He thinks the *Louise Bonne de Jersey* one of the most profitable varieties.

BARRELS FOR FRUIT.—Everything in contact with fruit should be clean and sweet, and the vessel in which it is placed should be dry and tight. Old flour barrels should not be used, unless well washed and dried, as the particles of flour left in the barrel will mould and impart to the fruit an unpleasant odor and flavor. Old lime barrels, it is said, are excellent for this purpose—the lime absorbing the vapor and gases. If this is so, a little fresh slaked lime scattered on the bottom, sides, and top of the barrel, would be beneficial.

APPLE TREES ON HIGH LAND.—L. S. STANDRING, of Denmark, Lewis Co., N. Y., states that they can not raise fruit in that locality, excepting red plums, gooseberries, raspberries, &c. He has repeatedly tried to raise apple trees but has uniformly failed. But on the uplands, two miles west, where they get snow one to two weeks earlier in the fall, and later in the spring, they succeed tolerably in raising fruit.

Ladies' Department.

ORIGINAL DOMESTIC RECEIPTS.

[Written for the Genesee Farmer by various Correspondents.]

BAKED QUINCE.—Bake until perfectly tender. Pare, core, butter, and sugar while hot, thoroughly mix. Excellent. With care in picking and storing, quinces may be saved for baking until mid-winter.

SWEET POTATO PIE.—Boil the potatoes very soft, then peel and mash them. To every quarter of a pound, put one quart of milk, three table-spoonfuls of butter, four beaten eggs, together with sugar and nutmeg to the taste. It is improved by a glass of wine.

MUFFINS.—Mix a quart of wheat flour smoothly with a pint and a half of lukewarm milk, half a tea-cup of yeast (family), a couple of beaten eggs, a heaping tea-spoonful of salt, and two table-spoonfuls of lukewarm melted butter. Set the batter in a warm place to rise. When light, butter your muffin cups, turn in the mixture, and bake the muffins light brown.

SHREWSBURY CAKE.—Stir together three-quarters of a pound of sugar, and half a pound of butter. When white, add five beaten eggs, a tea-spoonful of rose-water, and a pound of flour. Drop it with a large spoon upon flat tins that have been buttered. Sift sugar over them.

TUNBRIDGE CAKE.—Six ounces of butter, six of sugar, three-quarters of a pound of flour, two eggs, and a tea-spoonful of rose-water. Stir to a cream the butter and sugar, then add the eggs, flour, and spice. Roll it out thin, and cut it into small cakes.

MEASURE CAKE.—Stir to a cream a tea-cup of butter, two of sugar, then stir in four eggs beaten to a froth, a grated nutmeg, and a pint of flour. Stir it until just before it is baked. It is good baked either in cups of pans.

MUFFINS.—One quart of milk, three eggs, one cup of melted butter, five table-spoons of yeast, one tea-spoon saleratus, stir in flour until it is a thick batter. To be baked on a gridle.

ESSENCE OF CELERY.—Steep an ounce of celery seed in half a pint of brandy or vinegar. A few drops of this will give a fine flavor to soups and sauce for fowls.

FRUIT CAKE.—One pound and a half of flour, one pound of sugar, one-fourth of a pound of butter, one pint of sweet milk, six eggs, fruit and spice as much as you please.

JELLY CAKE.—One pound of butter, one of sugar, one of flour, twelve of eggs, nutmeg and rose water. Butter a dinner plate and bake thin; trim the edges with a pen-knife.

FRENCH LOAF.—One pound of flour, one of butter, one of sugar, gill of milk, gill of brandy, gill of wine, seven eggs, as much fruit as you please.

COOKIES.—Five cups flour, two of sugar, one of butter, one tea-spoon saleratus, three eggs, and caraway. Baked thin.

A RICH CORN BREAD.—Take two quarts corn meal, one quart wheat flour, a little salt, and four eggs; add sour buttermilk enough to form a stiff batter; mix well; then add two tea-spoonfuls of soda dissolved in a little warm water. Stir it well and pour it into greased pans, so that it will be about two inches thick when baked. Bake in a hot oven till done—say about half an hour.

TO MAKE GOOD BREAD.—First, get good flour. Second, take one quart of flour, scald it by pouring over it some boiling water. Then for each loaf of bread you want to make, add one pint of cold water; stir in flour till it is as thick as can conveniently be stirred. Then put in one half pint of good hop-yeast for every four loaves. Set it to rise over night. In the morning make up by adding flour till it is stiff dough. Knead well, mould into loaves, and, when light, bake it well, and you will have good bread.

MINCE PIE, SALT BEEF.—Boil the beef till very tender, take from the bone, and chop fine; then to every pound of meat, add one pound and a half of apples, pared and cored. Chop both together until the apples are fine, then to every five pounds of the mixture, add two tea-spoonfuls of black pepper, two table-spoonfuls of allspice, half a pound of raisins, one cup of vinegar, one of molasses, one of dried blackberries, stewed, and one pint of sweet cream.

PUMPKIN PIE.—Halve the pumpkin, take out the seeds, wash it clean, and cut it into small pieces. These are to be stewed gently until soft, then drained, and strained through a seive. To one quart of the pulp, add three pints cream or milk, six beaten eggs, together with sugar, mace, nutmeg, and ginger, to the taste. When the ingredients are well mixed, pour them upon pie-plates, having a bottom crust, and bake forty minutes in a hot oven.

BAKED BEANS.—To have a nice dish of baked beans, parboil half an hour, adding a little soda; then pour off the water and rinse them. Add your pork already notched, cover them with water, and let them boil an hour, adding a tea-spoonful of sugar to every quart of beans. Then put them in a baking dish, and let them brown nicely.

INDIAN TOAST.—Place two quarts of milk over the fire. When it boils, add a spoonful of flour to thicken, a tea-spoonful of salt, a small lump of butter, two table-spoonfuls of sugar. Have ready in a deep dish six or eight slices of light Indian bread toasted. Pour the mixture over them. Serve hot.

TO MAKE A BOILED INDIAN MEAL PUDDING.—Take one quart of buttermilk, two eggs, one tea-spoonful of soda, add meal enough to make a thick batter, tie it tightly in a bag, drop it in a kettle of boiling water, and let it boil one hour. Eat it with sauce to suit the taste.

FOR A BAKED PUDDING.—Set to boiling one quart of sweet milk, then add two eggs well beaten, with three table-spoonfuls of Indian meal and one of flour. Bake it three-quarters of an hour. Serve with cream and sugar.

COMMON CAKE.—One cup of sugar, two of cream, one tea-spoon of saleratus, three eggs, and flour to make it stiff.

New Advertisements this Month.

General Agency—William Lyon Mackenzie, Toronto, C. W.
Carpentry made Easy—Jas. Challen & Son, Philadelphia, Pa.
Andre Leroy's Nurseries, Angers, France—F. A. Bruguiere, Agent, New York.
Union Nursery—Charles Monison, Rochester, N. Y.
Sheppard's General Forwarding and Commission, Horticultural, Nursery, and Seed Agency—Wm. P. Sheppard, New York.
Model Mercantile College—G. W. Eastman, Rochester, N. Y.
Rochester and Lake Avenue Nurseries—J. Donnellan & Co., Rochester, N. Y.
$1,000 a Year—J. W. Bradley, Philadelphia, Pa.

Notes on the Weather and Season from August 15th to September 16th, 1859.—The last half of August gave rather delightful weather. The showers were adequate, mornings were dewy, many of the days full of sunshine, bright star-light nights, and the heat below the average, with very little hot weather. The mean temperature was 65°, being 2.5° below the average; the average of the month 68.6°, or 2° below the mean for twenty-two years. In Massachusetts on the 17th was a white frost in towns about Boston, but none about us to do the least injury. Frosts have occurred in New England and all the Northern States in each of the summer months.

The first half of September has been cooler still, the average being 57°, or 7.3° below the mean for twenty-two years. The rain has been but little. Heavy frost occurred in Michigan on the 7th, and in this vicinity on the 14th and 15th mornings. At Marquette, on Lake Superior, on the 1st and 2d, were rain and snow and frost; some snow also fell in the northern part of this State in the first week of September. Indeed, this has been the coldest first half of September here in the last twenty-six years. The next colder was in 1836, when the average was near 59°, about two degrees warmer than the present. This low temperature is the more striking as we know that the mean has been above 70° in some years. Weather very irregular. On the 11th, at sea in a storm, the Persia had hail as well as rain, and tempest of west wind. There is no doubt that the cold has been uncommon for this part of the year over a great extent of our country.

The progress of vegetation has been retarded, and Indian corn, so much put back by the frosts of June, has suffered somewhat, in many places, by the frosts of the first half of this month. In Michigan, both Indian corn and buckwheat suffered considerably by the frost of the 7th, and the same result took place in some localities in this vicinity, in the cold of the 15th, so that Indian corn is *being cut up by the roots and stacked in small masses*, as it ought to be, *to ripen the better*. Where the corn has not been touched by frost, it may be matured by the expected warmth of the last half of the month. Admitting all the drawbacks, the amount of corn to be harvested will be great, and the supply adequate for man and beast.

The aurora borealis was magnificent on the evening of August 28th, and at one to three o'clock on the morning of the 29th. The same was repeated on September 1st, in the evening, and continued on the morning of the 2d. On this day it re-appeared in the evening, and was splendid next morning, the 3d, and renewed again in the evening, when it was magnificent in its various colors of green, white, red and crimson, in its cloud and pillars, and its corona a little south and east of the zenith, and in the wide and rapid corruscations of light upward toward the corona. The whole southern horizon was overspread with it. It extended from regions north of Quebec to the Gulf of Mexico, and the Islands of Bermuda and Cuba, and from the Atlantic to west of the Mississippi. The aurora of August 28th and 29th appeared in England, and was said to have been unsurpassed in beauty and splendor for many years, if ever; the language also of American observers.

The Fruit Trade—Prospects.—A considerable quantity of apples and plums have been sent from this city to Canada, during the past few weeks. Bartlett pears have also been sent there—dealers paying $10 a barrel for them.

In this section, the plums are more abundant than they have been for many years. They sell for 75 cents to $2.25 per bushel.

The peach crop this year is a failure in Western New York. The trees are now very thrifty, and look as though we might expect a large crop next year.

Large Timothy.—A correspondent in Lewis County, N. Y., writes that he found a head of timothy in his meadow, this season, which measured eleven inches in length; others measured eight and eight and a half inches. He asks: "Have any of your correspondents found any better?"

The Rural Annual and Horticultural Directory for 1860 is now nearly ready. We think it will be found the best volume yet issued. We have room for a few appropriate advertisements. They should be sent in immediately.

How to Remit.—Money for the *Genesee Farmer* may be sent by mail at our risk. You need not "register" your letter. All current bills taken at par. Small sums may be sent in three cent postage stamps.

Errata.—In my last communication, page 284, September number, I think I wrote of the *Astrachan* apple, "the best *early* apple." Also, in regard to the *Dorchester* blackberry, "*first* fruit being small," &c. D. W. L.

It is thought that the wheat crop in Onondaga county, N. Y., will average twenty bushels per acre—the largest ever grown in the county. Mostly *Mediterranean*, but of excellent quality.

A gentleman in Erie county informs us that, owing to the drouth and scarcity of grass, cows have been sold in his neighborhood for $10 each.

The wool clip in Michigan this year is estimated at three and a half million pounds; that of Wisconsin at one million pounds.

The cultivation of tobacco is rapidly extending in this section. The crop this season is very large.

THE GENESEE FARMER FOR 1860.—On the last page of this number will be found a List of Cash Premiums for the greatest number of subscribers for the *Genesee Farmer* for 1860, sent in by the 15th of January.

In order to induce those of our friends residing at post offices where we have now few subscribers, to compete for these premiums, we have determined to send the *Genesee Farmer* for the two remaining numbers of this year (November and December) and the entire volume of 1860, to all who subscribe before the first of December, at the usual rates for the year, (50 cents), or to those who form clubs of eight or more, at *forty cents* each!

Will not all our agents and friends take hold of this matter at once? All such subscribers will be counted in determining the award of Premiums. Now is the time to commence getting names, before other agents commence canvassing. Judging from the past, we are sure the agents and friends of the *Genesee Farmer* will not be behind hand. Recollect, *the volume for* 1860, *and the two remaining numbers of this year for* 40 *cents each!*

"ONLY FIFTY CENTS A YEAR.—Let every one who knows the fact, *tell his neighbor* that he can now get, in your agricultural paper, for fifty cents, what at the lowest calculation is worth *twenty dollars* a year were we deprived of the paper. *Sound it abroad!* ONLY FIFTY CENTS A YEAR!"

So wrote a correspondent of the *Genesee Farmer* in 1845. The advice was good then. It is good now. "Sound it abroad! Only fifty cents a year!" Let every one "*tell his neighbor.*"

The *Genesee Farmer* was then so cheap as to excite surprise. How much more so now! It then contained only 16 pages; now it contains 32 pages—and more than as much again matter. "*Sound it abroad!* ONLY FIFTY CENTS A YEAR!" Let every man "*tell his neighbor*"—that by subscribing now *he can get the two remaining numbers of this year and the volume for* 1860, *for only fifty cents.*

PREMIUMS FOR THE HALF VOLUME.—Our friends will bear in mind that the time for competing for the Premiums for the greatest number of subscribers for the current half volume of the *Genesee Farmer*, closes on the fifteenth of this month. Send us all the names you can, so as to reach us on or before that day. The names of the successful competitors will be announced in the November number, and the money immediately paid. Our friends have done nobly. They have sent in nearly six thousand new subscribers for the half volume! We return them our sincere thanks. Words can not express our gratitude. We will endeavor to manifest it by renewed efforts to make the *Farmer* worthy of the support of such true and disinterested friends of the cause of agricultural and horticultural improvement.

FOURTEEN MONTHS IN THE YEAR.—To new subscribers who send us fifty cents before the 1st of December, we will send the two remaining numbers of this year (November and December) and the entire volume of the *Genesee Farmer* for 1860! Will all our friends—will *you*, kind reader—inform your neighbors of this liberal offer? See the last page for a still more liberal offer to those who form clubs, and also for a List of Cash Premiums to be awarded to those who send in the greatest number of subscribers.

Read what is said of the Genesee Farmer.

In this community, the *Genesee Farmer* stands in no need of praise, for it has a great popularity.—*Advertiser, Fredonia, N. Y.*

This valuable monthly should be in the hands of every farmer. It will pay its cost many times over.—*Herald, Springville, N. Y.*

We call attention to one of the oldest and most substantial agricultural papers in the United States. Mr. HARRIS gets up one of the best monthlies that comes to our table. —*Daily Democrat, Chicago, Ill.*

The *Genesee Farmer* is a name as familiar to thousands as it is to us. The *Farmer* is a tip-top monthly, published by JOSEPH HARRIS, at the low price of fifty cents a year. —*Weekly Advertiser, Polo, Ill.*

The *Genesee Farmer* is undoubtedly the cheapest agricultural journal in the world, and we think better calculated to promote the interest of farmers than any other work of the kind within our knowledge.—*People's Press, Bluffton, Ind.*

This old and valuable farmers' paper is one of the very best agricultural journals published. There is scarcely a subject that would interest the farmer but what is treated of in its columns. Every farmer should have this periodical.—*Jacksonian, Pontiac, Mich.*

The frequent and copious extracts, which we meet with in our reading, from the *Genesee Farmer*, show the general appreciation with which this journal is regarded. We recommend this as one of the oldest, most reliable, and practical journals of its class. — *Enterprise, Ellicott's Mills, Maryland.*

This old and popular favorite is promptly on our table, and filled with matter interesting and instructive to the agriculturist. It is one of the oldest publications of the kind in the Union, and ranks second to none. The low price at which it is published—only fifty cents a year—places it within the reach of every one.—*Livingston Republican, Geneseo, N. Y.*

We desire to call the special attention of our farmer friends to that old and well known agricultural journal, the *Genesee Farmer*. It is a paper that can not be too highly commended—eminently practical and scientific, and abounding with matter interesting and useful to every farmer and fruit grower. It has been published in Rochester for twenty-eight years.—*Dispatch, Pittsburg, Pa.*

The *Genesee Farmer* is a handsome and tastily got up monthly of thirty-two pages, making, at the close of the year, a volume of three hundred and eighty-four pages in excellent form for binding. We commend this paper to our readers. It has a larger circulation than any other similar journal in the world, which is an evidence of its worth. It is the oldest, the cheapest, and the best.—*Tribune, Hornellsville, N. Y.*

The *Genesee Farmer* has for twenty years occupied a high rank, if not the foremost, in the list of American agricultural journals, and we would desire to bring it to the notice of the farmers of Canada as one worthy of their patronage. The receipts in the Ladies' Department are alone worth the cost of the paper. The monthly review of the principal markets in the United States, Canada, and England, is a valuable feature.—*Daily News, Kingston, C. W.*

The *Genesee Farmer* is the oldest and probably the cheapest and best agricultural publication in the country. It is standard authority with farmers; comes from the very garden of the Western World: and its columns are filled with precisely such practical matters and original suggestions as every real farmer needs to be in possession of. It costs only fifty cents a year, and is really more valuable as a farmers' manual than most of the two dollar papers in the country.—*Advertiser, Norway, Maine.*

We remember to have had the reading—twenty-five years ago or more—of what was then nearly the only agricultural paper in the United States, the old "*Genesee Farmer.*" Well, here are before us two numbers of that self-same publication, and brimfull of good things for the farmer, the gardner, and the fruit-grower. Success, say we, to the *Genesee Farmer*—the pioneer farmer's publication in the country. Long may it continue to shed its benefits over the land.—*Representative, Hamilton, Ill.*

Inquiries and Answers.

GRAPE VINES — UNDERDRAINING — TRAINING. — The increasing interest manifested in the raising of grapes and the cultivation of the vine in this country, I hope will be deemed a sufficient excuse for my asking the editor, or some of the numerous correspondents of the *Genesee Farmer*, two or three simple questions upon the subject of their culture, treatment, &c. And though at first it might seem to be asking too much, simply for the gratification or instruction of one subscriber, yet the undersigned is inclined to think that the information is just what many other readers of the *Farmer* would be glad to know, as nearly every individual at this day, who has a small farm, or patch of ground, though only large enough for a garden, either has his vines, or contemplates their cultivation at no very distant day.

In all the essays and instructions, coming under the notice of the undersigned, on the preparation of the soil for the grape, much stress seems to be laid upon the necessity of draining, as if no soil was suitable for the cultivation of the vine unless thoroughly drained. Now if the land is wet, or the soil naturally heavy, no one would doubt but what draining would be indispensible. But suppose I have a farm, or a garden, for instance, with a light gravelly loam soil resting upon a bed, at the depth of two and a half or three feet, of what is usually termed hard-pan, with a mixture of stone and gravel, and on the surface of which water never stands except for a few moments after hard and heavy rains. In such case, would drainage be necessary? Then suppose I have a border on one edge of my garden, with such a soil as described above, where I wish to set a few vines of some of the choicest varieties, at the distance of eighteen feet apart, *must* I prepare the soil artificially before setting, and when set under these circumstances, how should they be treated, and how trained?

I have an *Isabella* growing, that, at the age of four or five years, after being well rooted, was laid down in a trench extending each way from the parent root, and covered so as to leave the tips out, forming canes at the distance of twelve or fourteen inches from each other. Now I wish to know how these should be trimmed and how trained, with a view to the health of the vine and the realization of its fruits?

These interrogatories have been suggested, Messrs. Editors, from the fact that it has seemed to the undersigned, though perhaps erroneously, that nearly all those who have recently written on the subject, start upon the supposition that your land is cold and wet, and that you are cultivating for a vineyard. Hence I have no doubt but that the information sought, would be interesting to a large share of your subscribers, who unfortunately are compelled to take rank among those who have been denominated "greasy mechanics and small fisted farmers."— P. H. PERRY, *Collins Centre, N. Y., Sept. 12th*, 1859.

OUR correspondent's inquiries are pertinent, and such as interest a large class of the community, as grape-growing is becoming an extensive and valuable branch of the horticultural interest of the country, and too much attention can not be paid to the various operations which are requisite to the production of this fine fruit.

The soil, mentioned above, is the best which can be selected for growing the grape, and without underdraining, such soils, if otherwise well dressed and cultivated, will yield generous crops of grapes; and we should not hesitate to plant large vineyards on such soil, and expect profitable returns; but, there are few soils, that are so naturally dry and warm as to render underdraining unnecessary. Land well underdrained is much earlier in the spring, which is a quality that can not be too highly prized in our northern climate, where the summers are never too long for the perfect maturation of the grape. The quality of the fruit and the wine is also greatly superior when produced on warm dry soils. This difference is so great, that, in France, experienced vintners can decide, from the flavor of the wines, at what altitudes the grapes from which they have been made were grown.

The mode of training grape vines, which those who have had most experience coincide in adopting and recommending in this climate, is that now well known as the *renewal system*, and which we have illustrated in the early numbers of the *Farmer* this year, and in the *Rural Annual* of 1858.

OSAGE ORANGE HEDGE—IRISH POTATOES.—(MRS. EMILY J. GROVER, Richmond.) The plan of growing Osage Orange hedges is briefly this:—Assuming that the soil where the hedge is to stand has been previously well manured and deeply pulverized, the plants, having been shortened at both ends, so that the roots are not more than five or six inches in length, and the tops about an inch, should be planted with a dibble or spade, from four to six inches apart along a straight line. The first and second summers the only attention necessary will be to hoe frequently and keep entirely free from weeds. In the spring of the third year, or the second spring after planting, cut down every plant even with the surface of the ground, which will cause a number of shoots to start out directly from the root of the plants. About the latter part of June of this season, the hedge should be cut the second time, from four to six inches above the surface of the ground; and in the following spring cut it from one and a half to two feet high, varying somewhat with its thickness. In June of this year, clip it into its final form, which should be pyramidal, or with a wide base tapering gradually to the top. Should it be desirable to increase the height or width after this, it can readily be done at the season of clipping.

We can recommend, as an excellent and productive potato, the *English Fluke*. We are not acquainted with the *White Fozite*.

PROPAGATION OF FLOWERING SHRUBS.—(LUCY A. MANNING, Danby, Vt.) The double-flowering Almond is usually budded on the stalk of the common Almond or Peach. Pœonies are readily grown from seed, but it will be found difficult to produce such as are of any value in this way. Honeysuckles may be grown by layers or cuttings. Running Roses you may be able to root from cuttings, in the summer, after the wood is partially hardened, by placing them under bell-glasses; but they will require much care, and you will probably make many failues before you succeed. The cuttings should be made from four to six inches in length, being cut to a bud at their base, and with the leaves attached at the upper ends. Plant them in pots or boxes, or even in the ground, where the convenience of shade may be had, and cover with a bell-glass. Sprinkle or syringe them every evening, and do not admit the sun to shine upon them until they are rooted, when they may be gradually exposed.

We have sent you a catalogue of one of our leading nurseries, in which you will find such other information as you ask for.

CATAWBA GRAPE IN IOWA.—(M. THOMAS, Kossuth, Iowa.) The *Catawba* grape can be grown and ripened in your locality, though it will seldom be in such perfection as it attains in a more southern climate. It will be well to give it a trial. The *Isabella* will ripen more perfectly with you; and we would also recommend *Concord, Diana, Delaware, Rebecca*, and *Hartford Prolific*.

Is there any cure for ring-bone on horse's feet?—L. F., *Delaware Co., Ind.*

POTATO SEED.—Will you or some of your correspodents be so kind as to inform me the best mode of preserving the seed of potatoes, the proper time of gathering the balls, &c.? Our potato tops hang quite full of balls. For any information I will be much obliged.—C. R. S., *Pinckney, N. Y.*

The largest and ripest balls may be gathered in September, or as soon as they turn yellowish, the seeds taken out, washed from the pulp, and dried, and kept till the following spring, when they may be sown in drills in a warm situation and rich soil, in May. When the young plants are two or three inches high, thin out to five or six inches apart in the drills. A very few small potatoes will be produced the first year. These, if planted the next spring, will produce tubers of a sufficient size to determine their properties. Sometimes a third year's growth is necessary to decide their fruit satisfactorily.

WHAT is the best method of storing carrots and mangel wurzel, through the winter?—O. P. ST. JOHN, *St. Catharines, C. W.*

CAN any of your correspondents give me a cure for poll evil?—C. G. N., *Palestine, Ia.*

Notices of Books, Pamphlets, &c.

TENT AND HAREM. Notes of an Oriental Trip. By CAROLINE PAINE. New York: D. APPLETON & Co. Price $1.

WALTER TORNLEY; or, A Peep at the Past. By the author of "Allen Prescott," &c. New York: HARPER & BRO'S. $1.

AMERICAN WIT AND HUMOR. Illustrated by J. MCLENAN. New York: HARPER & BRO'S. Price 50 cents.

THE LIFE OF JABEZ BUNTING, D. D., with Notices of Contemporary Persons and Events. By his son, THOMAS PERCIVAL BUNTING. Vol. 1. New York: HARPER & BRO'S. $1.

LIBERTY AND LIFE IN AMERICA; or Sketches of a Tour in the United States and Canada in 1857-'58. By CHARLES MACKAY, LL. D., F. S. A. With ten Illustrations. New York: HARPER & BRO'S. Price $1.

LOVE (L'Amour). From the French of M. J. MICHELET. Translated from the fourth Paris edition, by J. W. PALMER, M. D., author of "The New and the Old," &c. New York: RUDD & CARLETON. Price $1.

BREAKFAST, DINNER, AND TEA, viewed Classically, Poetically, and Practically. Containing numerous curious Dishes and Feasts, of all Times and all Countries, besides 300 Modern Receipts. New York: D. APPLETON & Co. Price $1.50.

CHAMBERS' ENCYCLOPÆDIA: A Dictionary of Universal Knowledge for the People, on the basis of the latest edition of the German Conversations Lexicon. Illustrated by Wood Engravings and Maps. Part 5. New York: D. APPLETON & Co. Price 15 cents per number.

All the above books are for sale by D. M. DEWEY, of this city.

AQUECHEEK. Sketches of Foreign Travel. Boston: SHEPPARD, CLARK, & BROWN. Price $1.

For sale by E. DARROW & BRO., of this city.

THE LIFE OF GENERAL GARIBALDI. Written by himself, with Sketches of his companions in arms. Translated by his friend and admirer, THEODORE DWIGHT, author of "A Tour in Italy in 1821," &c. Embellished with a Portrait on Steel. New York: A. S. BARNES & BURR. Price $1.

For sale by E. DARROW & BRO., of this city.

A NATURAL PHILOSOPHY. Embracing the most recent Discoveries in the various Branches of Physics, and exhibiting the Application of Scientific Principles in Every-Day Life. By G. P. QUACKENBOS, A. M., author of "Illustrated School History of the United States," &c. New York: D. APPLETON & Co. 1859. Price $1.

For sale by ADAMS & DARNEY, of this city.

ESSAYS AND DISCUSSIONS ON AGRICULTURE, before the Farmers' Club of Little Falls. Edited by the Secretary of the Club. Little Falls, N. Y.: D. AYER.

All the above books can be obtained from the respective publishers, sent, prepaid by mail, for the price annexed.

REVIEW OF THE MARKETS.

GENESEE FARMER OFFICE,
ROCHESTER, N. Y., SEPT. 22, 1859.

THE advance in Breadstuffs, noticed in our last issue, was of short duration. It continued, however, for a few days, and prices considerably higher than those quoted in our reports were obtained. A more liberal movement of Flour and Grain at the West soon induced buyers to act with more caution, and, the receipts exceeding the demand, the market became less firm, and prices gave way. A decline, equal in rapidity and extent to the previous advance, then followed. This, too, was of a temporary character. A firmer feeling soon became manifest, and prices again advanced, in a short time, to the point from which they had receded. The upward tendency has again been arrested, and a downward movement has about run its course, which may, and probably will, be followed by one in the opposite direction.

The above is an outline of the fluctuations in the price of Breadstuffs in New York since our last report. Other markets have been more or less affected in a similar manner. With such a tendency to change, which seems to be peculiar to American markets, it is not easy to form an opinion as to what the state of matters may be at any given time in the future. It is equally difficult, also, to conceive any adequate cause, or reason, for these ever-recurring variations.

The quality and condition of Western Wheat is better this year than usual; it is more mellow, and works easier and better in the hands of the miller. The Flour made from Spring Wheat is far superior to that produced from this grade for some time past. This is gratifying to all parties. There is more satisfaction in having to do with a good article than with a poor one. This grade of Flour will be more acceptable for general consumption, and will take the place, to a certain extent, of those brands which have heretofore commanded a higher price. There is, however, still an important defect in the quality of Western Spring Wheat, arising from the quantity of Oats mixed with it. Will not Western farmers make a determined and effective effort to keep their Wheat and Oats apart, and sell both intermixed no more?

The Wheat crop in England has been generally secured in good condition; that part which was soonest taken up is perhaps an exception, as the weather was then less favorable. The quality of the new Wheat in the south of England and in France is inferior to that of last year. In northern Europe and Russia, the quality is reported to be good. It is yet too early to make a reliable estimate of the general yield. It will not probably, on the whole, fall much below an average. The large quantity of old Wheat still held by farmers will make up the deficiency. Late accounts represent the trade as dull, with little prospect of higher prices for some time to come.

The market for Corn is very firm, and quotations are higher. Barley, Oats, and Rye, steady, with but little change.

Pork is higher and steady. Beef lower, but firm at the decline. Bacon is higher and steady. Butter a little lower. Other articles in the provision line, without change to notice.

The supply of good Beef Cattle is limited; that of medium and ordinary is large. The former command full rates. The latter are lower, and the trade is dull.

The demand for medium and low grades of Wool has improved. The market is firm, and sales are made at full rates.

ROCHESTER MARKET.—Sept. 22.

FLOUR—Superfine from red wheat, $4.50@$5; extra from white wheat, $5.50@$6.

GRAIN—White wheat, $1.10@$1.25; red do., 90c@$1. Corn, 72c@75c. Rye, 62½c. Barley, 62½c. Oats, 32c@33c. White Beans—none offered—would probably bring 70c@75c.

PROVISIONS—Mess Pork, $18.00@$19.00. Hams, 10c@11c for smoked. Shoulders, 7c@8c. Lard, 12c. Butter, 13c@16. Cheese, 9c@10c. Eggs, 12c@13c. Potatoes, 25c@33c. Dressed hogs, 7c per lb.

CATTLE MARKET—Beef Cattle, live weight, $4.00@$5.—Calves $3@$5 per head. Sheep, $3@$4 per head. Lambs, $1@$2 each.

HIDES—Beef hides, 6c per lb. Calf skins, 10c per lb. Pelts, 25c@75c each.
HAY—$13@$17 per ton.
WOOL—35c@50c per lb.

NEW YORK MARKET.—Sept. 22.

FLOUR AND MEAL—Market for State and Western Flour firm, with a moderate local demand and some inquiry for export. Superfine State, $4.00@$4.25; extra do, $4.40@$4.55; Western superfine, $4.00@$4.50; extra do, $4.75@$5.75; shipping brands Ohio round-hoop, $4.85@$5.20 Canadian extras, $5.0 @$5.75. Southern Flour—Baltimore superfine, $4.90@$5.10; extra do, $5.25@$5.75; Brandywine, $5.50; Georgetown, $5.25@$6; Petersburg city, $5.50@$7.00; Richmond city, $6@$7 25; Galego and Haxall, $8.50. Rye flour dull at $3.50@$4.40 for fine and superfine. Corn meal—Jersey, $3.85; Brandywine, $4.10@$4.15; puncheons, $19.

GRAIN—Wheat firm. Kentucky white, $1.30@$1.40; Western white, $1.20@$1.35; State red, $1.10; Southern red, $1.10@$1.22; Milwaukee and Canadian club, 85c@$1.05; Illinois and Ohio red winter, $1.05@$1.12; Chicago spring, $75c@$1. Corn firm: Western mixed, 90c; Southern white, 92c; yellow, 98c.—Rye firm at 80c@81c. Barley, 60c. Oats—Jersey, Delaware, and Pennsylvania, 35c@37c; Old State, 38c@40c; new do, 41c@43c; Western, 37c@39c; Canadian, 38c@40c. White Beans 80c@85c.

SEEDS—Clover, 8¾c@9¾c per ... Timothy, $2.00@$2.25 for mowed; $2.37½@$2.75 for reaped, per bushel. Red top, $2.62½@2.87½ per five bushel bag.

PROVISIONS—Pork steady at $15.62 for mess; $14.25 for thin do; $17@$17.50 for clear; $16.50 for prime. Beef firm—country mess, $6@$6 87 prime $5@$5.50; re-packed mess, $7.50@9.50; extra, $10.25@$11.50. Bacon, 9¾c@10c. Hams, 8¾c@9c.—Shoulders, 7¾c@7¾c. Lard, 10¾c@11c. Butter—Ohio, 12c@16c; State, 17c@20c; Orange county, 22c@25c. Cheese, 9c@9½.

CATTLE MARKET—First class Beef Cattle scarce, and sell at full rates; ordinary in large supply and lower; first quality, 9c@10c; medium, 8@8¾c; ordinary, 6c@7c; extra good, 10¼c. Veal Calves 6¾c@7c per lb. live weight. Sheep and Lambs sell at $1.50@$4 per head, according to quality. Hogs, $5.75@$6.25 per 10 lbs. gross.

WOOL—Demand moderately active. State and Western fleece 37½@62½c for common to choice; Canada mixed, 32c@34c; Canada sorted, 37c@38c.

PHILADELPHIA MARKET.—Sept 20.

FLOUR AND MEAL—The market is quite dull, with small sales for local purposes. Old and new superfine, $4.50@$5; extra and fancy, $5@$6.50 for the range. Rye Flour firm at $4. Corn Meal more active at $3.50 for Pennsylvania.

GRAIN—Wheat dull; prime red, $1.18; common do., $1.08@$1.10; white, $1.25@$1.30. Rye, 75c@80c for Pennsylvania; new Southern, 71c@72c. Corn in demand at 78c for white, and 80c for yellow. Oats steady at 36c for new Southern; 37c for Pennsylvania. Barley malt. 70c@90c.

SEEDS—Clover, $5.25@$5.62½; Timothy, $2.37@$2.75. Flax seed, $1.60@$1.63 per bushel.

PROVISIONS—Market more active. Mess Pork, $15.50@$16. Mess Beef, $16 for city packed. Bacon—Hams, 10¾c@12¾c; sides, 10c@10¾c; Shoulders, 8c@8¾c. Lard firm at 11¾c for barrels and tierces; 12¾@12¾c for kegs. Butter 10c@12c for packed; 18c@14c for roll. Cheese, 9¾c@10c.. Eggs, 14c.

CATTLE MARKET—The receipts of Beef Cattle were large, and the market dull. Good Cattle brought a fair price, but common were offered low. $7@$9.50 per 100 lbs was about the range. Cows, $20@$4 , according to quality. Sheep, 7c@8c per lb. Hogs, 7c@7¾c per lb.

WOOL—Market firm at 38c@40c for tub; 45c@55c@62½c for quarter to full blood and fine fleece.

BUFFALO MARKET.—Sept. 22.

FLOUR—Market firm, with fair demand. State from Spring wheat, $4.25; extra Canadian, Ohio, Michigan, and Indiana, $4.75@$5; double extra do., $5.25@$5.50; extra Illinois and Iowa, $4.25@$4.50.

GRAIN—Wheat in fair demand, and better; Chicago spring No. 1, 87c@88c; No. 2 do., 84c@85c; red Ohio, $1; White Canadian and Indiana, $1.10@$1.14. Corn firm at 80c. Oats firm at 32c@33c. Barley steady at 65c. Rye firm at 70c. Canadian Peas, 60c.

SEEDS—Clover, $5. Timothy, $2.00@$2.12.

PROVISIONS—Mess Pork, $15.50 for heavy; $14.50 for light; nothing doing in prime Hams—plain smoked, 9½c; canvassed, 10c; sugar-cured, 10¾c. Shoulders—smoked, 8c. Lard dull at 11¾@11¾c. Butter steady at 16@20c. Hamburgh Cheese, 7@8c.

CHICAGO MARKET.—Sept. 20.

FLOUR—Winter white extra, $4.50@$5.25; red do.; $4.12½@$4.50; Spring superfine, $2.80@$3.50; extra do.; $3.75@$4.25.

GRAIN—Winter wheat dull; spring active and firm: No. 1 white winter, $1; No. 2 do., 86c@88c; No. 1 red do., 88c@90c; No. 2 do., 74c@75c; No. 1 spring, 73c@75c; No. 2 do., 72c@73c; rejected, 65c; all in store. Corn, 68c@71c in store and f. o. b.—Rye—No. 1, 58c@60c. Barley, 52c@54c on track and in store. Oats, 26c@27½c in store and afloat. Beans dull at 40@70c.

SEEDS—Clover, no sales. Timothy, $2.05@$2.08.

PROVISIONS—Mess Pork, $15@$15.25. Bacon firm; Hams, 10¾c@11¾c; Shoulders, 8c@8¾c. Lard, 11c. Butter, 14c@15c for fresh; firkin, 12c@14c. Cheese, 7c@8c for W. R.; 8c@10c for Hamburgh. Eggs dull at 8c@8¾c. Potatoes, 40c@5 c.

POULTRY—Spring Chickens, $1.50@$1.75 per dozen. Live Turkeys, 7c@8c per lb.

CATTLE MARKET—Beef Cattle—Extra quality, $2.7 @$3.00 ordinary, $1.50@$2.50 per cwt. Sheep, $3 per cwt. Hogs, $5.00 per cwt.

HIDES—Market firm. Green city, 6; do. country, 6c@7c; green salted, 8c@8¾c; dry do., 13c@14c; dry flint, 15½@16½c; pelts, 25c@30c.

WOOL—No transactions to report.

CINCINNATI MARKET.—Sept. 21.

FLOUR—Market inactive. Superfine, $4.50; extra, $4.75@$5.

GRAIN—Wheat firm, with a steady de and. Prime white, $1.10; good do., $1.0 @$1.08; fair do., $1@$1.03; good to prime red, 95c@$1. Corn firm at 75c. Rye firm at 75c, with an upward tendency. Barley active at 75c for winter, and 70c for spring. Oats, firm at 37c.

SEEDS—Clover steady at $5.60@$5.75. Timothy dull at $2.20 @$2.25. Flax firm at $1.10.

PROVISIONS—Mess Pork, $14@$14.25, closing firm. Bacon in demand; sides, 9¼c@9¾c; shoulders, 7¼c. Lard, 11c for barrel; 11¾c for keg. Butter—Choice Western Reserve, 15@16c; good to prime fresh Ohio, 12c@14c; common and fair, 11c@12c. Cheese active and firm at 8¾c for prime Western Reserve; 8¾c @9c for extra large do; 10½c@11c for English dairy; 16¾c for Norton's pine apple. Potatoes—Northern, 35c@45c; prime Ohio Neshannocks, 50c@60c.

CATTLE MARKET—Beef Cattle in good supply and dull, closing at $2@$3.50 per cwt. gross. Sheep firm at $1.50@$3.25 each. Hogs, $4.75@$5.50 per cwt. gross.

HIDES—Market firm. Flint, 16c@17c; dry salted, 15c@16c; green salted, 7¾c@8c; green, 7c.

HAY—$16 per ton, with a moderate demand.

TORONTO MARKET.—Sept. 21.

FLOUR—Market firm; superfine, $4.35@$4.40; fancy, $4.60@$4.70; extra, $4.80@$5.

GRAIN—Wheat dull; ordinary to fair, 90c@95c; extra, $1@$1.03; spring, 85c@87c. Barley active at 65c@68c. Rye steady at 60c. Oats, 28c@30c. Peas scarce at 55c@58c.

PROVISIONS—Fresh Butter dull at 16c@18c; firkin, 12@14c. Eggs, 12c@12½c. Potatoes, 28@34c for ordinary to good quality. Dressed hogs, $6@$6.50 per 100 lbs.

POULTRY—Supply good at 30c@35c for chickens, and 37½c @40c for ducks, per pair.

FRUIT—Apples $1.75@$2.25. Pears $4@$5, per barrel.

CATTLE MARKET—Beef Cattle in good supply at $3.75@$5 for ordinary to good. Calves, $5@$7 each. Sheep, $3.50@$4.50 each. Lambs, $1.75@$2 each.

HIDES—Beef hides, 6c per lb. Sheep skins, 80c from butchers, 40c@45c from pedlars, each.

WOOL—27c@28c per lb.

HAY—Market steady. Timothy, $22@$25 for best quality; medium, $17@$20 per ton. STRAW—$9@$11 per ton.

LIVERPOOL MARKET.—Sept. 2.

FLOUR AND MEAL—Western canal Flour, $4.80@ $5.52; Philadelphia, Baltimore, and Ohio, $5.28@$6.24; Canadian, $5.76 @$6.24; extra qualities, $6.24@$6.72; sour, $4.32@5.28. Indian Corn Meal, $4.32@$4 56 per bbl.

GRAIN—American white wheat, $1.36@$1.50; red do, $1.22@ $1.32; Canadian white, $1.28@$1.44; do. red, $1.20@$1.28. Indian corn—white, $1.08@$1.15; yellow, 84c@89c; mixed, 88c@ 85c. All per bush. of 60 lbs.

WOOL—Market without change. 12c to 40c per lb.

LONDON MARKET.—Sept. 5.

FLOUR—American sour, $5.28@$6.00; sweet, —.

GRAIN—Wheat—American white, $1.26@$1.44; do red, $1.26 @$1.38. Indian corn—white, 90c@93c; yellow, 87c@93c, per 60 lbs.

WOOL—Market less active. 28c@48c per lb.

BRIGHTON CATTLE MARKET.—Sept. 22.

At market, 1700 Beeves, 1100 Stores, 5000 Sheep and Lambs, 500 Swine.

PRICES—Market Beef—Extra, $7.75@$0.00; First quality, $7.50; Second, $6.50; Third, $5.00. Working Oxen—$100@ $130. Milch Cows—$41 @ $44; Common, $18 @ $19. Veal Calves—$3.00@$6.00. Yearlings—$9@12. Two Years old—$16 @$20. Three Years old—$22@$25. Hides—7¾c@8c per lb.—Calf Skins—12c @ 13c per lb. Tallow—7 @ 7¾c. Sheep and Lambs—$1.00@$1.50; extra, $2.0 @$2.75 Pelts—$0.62@$0.75. Swine—Spring Pigs, 6c: retail, 6c@7¾c. Fat Hogs—none.

Beeves are sold here by the head, at prices per lb. equal to the estimated weight of beef in the quarter, together with the fifth quarter, or the hide and tallow, at the same price, at a shrinkage from live weight agreed on by the parties—from 28 to 34 per cent.

ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the *Genesee Farmer* for twenty cents a line, or $2 per square, each insertion, payable in advance. To secure insertion, they should be sent in by the 15th of the previous month. The *Farmer* has large lists of subscribers in *every State and Territory, and in all the British Provinces.* (It has nearly 3000 subscribers in Canada West alone.) There is no better or cheaper medium for advertising everything of general interest to rural residents in all parts of the United States and Canada.

EVERY FARMER SHOULD POSSESS "CARPENTRY MADE EASY."—It teaches a new system of Framing for Buildings, Farm Houses, Barns, Bridges, &c., so that every farmer can be his own carpenter. Price $3 sample copy; $2 by mail, postpaid. JAMES CHALLEN & SON,
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SOMBRERO GUANO.—80 per cent. Bone Phosphate of Lime. Try five bags this fall on an acre of your poorest land, or Winter Wheat. Send or write for a circular and certificate from those who have used it. Sold at $30 per ton 2000 lbs.—14 bags to ton. WOOD & GRANT, New York.
Sept.—2t* WM. A. MARTIN & CO., New York.

ANDRÉ LEROY'S NURSERIES,
AT ANGERS, FRANCE.

THE Proprietor of these Nurseries, the most extensive in the world, has the honor to inform his numerous friends and the public, that his CATALOGUE of FRUIT and ORNAMENTAL TREES, SHRUBS, ROSES, SEEDLINGS, FRUIT STOCKS, &c., for the present season, is now ready, and at their disposal.
Apply, as heretofore, to
F. A. BRUGUIÉRE,
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UNION NURSERY,
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THE Proprietor of this Nursery offers for sale, this autumn, a large stock of Fruit and Ornamental Trees, consisting in part of the following, to which the attention of purchasers is respectfully invited:

5,000 Standard Apple Trees, 4 to 6 years old.
2,000 Dwarf do. on Paradise, 3 to 4 years old.
8,000 Standard Pears, 2 to 4 years old.
12,000 Dwarf do. 2 to 6 years old.
5,000 Standard Cherries, 2 to 3 years old.
2,000 Dwarf do. on Mahaleb, 2 to 3 years old.
2,000 Peaches.
2,000 Orange Quinces.
3,000 Queen of Prairie Roses—strong plants, for sale low by the hundred or thousand.
2,000 Hybrid Perpetual and other Roses.
2,000 Giant Rhubarb.
Also, 50,000 Apple Trees, two years old.
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Anything and everything required by Seedsmen, Nurserymen, Florists, &c., in the prosecution of their business, at the lowest market rates. Send for a circular. Address
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Rochester, N. Y., October, 1859.

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Which will be found of the best quality, and sold at low prices, *wholesale* or *retail*, comprising the following:

Apples, Standard and Dwarf.
Pears, do. do.
Cherries, do. do.

Peaches, Plums, Nectarines, and Quinces. Grapes, including the most of the new varieties. Currants, Gooseberries, Raspberries, and Strawberries. Lawton Blackberries. Victoria Rhubarb and the true Giant Asparagus. Ornamental Trees, Shrubs, and Evergreens.

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THE

GENESEE FARMER

FOR 1860.

BELOW will be found our Premium List for 1860. Our Specific Premiums are the same as last year, except that we do not offer specific premiums for larger lists than twenty-four, for the reason that any larger list than this will probably take a Cash Premium. The January Cash Premiums are larger and more numerous than ever before. Few persons compete for them, and very small lists will secure them. A few hours spent in canvassing is all that is necessary.

If there is no agent for the *Farmer* in your town, will not *you*, kind reader, act as agent for us in your neighborhood? The *Genesee Farmer* is so cheap that everyone interested in the cultivation of the soil will subscribe, if asked; and few do so unless they *are* asked. Show them a copy of the paper, and tell them its price, and they *can not help but take it*. Now is the time to attend to this matter. To all who subscribe previous to the first of December, we will send the *Farmer* for the remaining two months of this year (November and December) and the entire volume for 1860 for fifty cents; and to all who intend forming a club for next year, we will send the fourteen months, as above, for forty cents each. These subscribers will be counted in the club in competition for the Premiums. This is an excellent opportunity to induce those who do not take the *Farmer* this year to subscribe. Will not all our friends—will not *you, sir*,—make an effort to increase our list of subscribers for 1860? We will gladly send you show-bills, specimens, &c., if you will act as agent.

LIST OF PREMIUMS.

THE terms of the GENESEE FARMER are: Single Subscribers, Fifty Cents a year, in advance; Five Copies for Two Dollars; Eight Copies for Three Dollars; and any larger number at the same rate. All subscriptions to commence with the year.

In addition to this reduction of one-fourth, we offer the following List of Specific Premiums as an extra inducement for our friends to form Clubs.

SPECIFIC PREMIUMS.

1. To every person who sends us EIGHT Subscribers, *(at our lowest terms of thirty-seven and a half cents each,)* we will send, postage paid, a copy of our beautiful twenty-five cent book, the *Rural Annual* for 1860.

2. To every person who sends us SIXTEEN subscribers, (at our lowest club terms of *thirty-seven and a half cents each,*) we will send one extra copy of the *Genesee Farmer* and one copy of the *Rural Annual*, pre-paid, by mail.

3. To every person sending us TWENTY-FOUR subscribers, as above, we will send two extra copies of the *Farmer*, or two copies of the *Rural Annual* and one extra copy of the *Farmer*.

JANUARY CASH PREMIUMS

For the Greatest Number of Subscribers.

Thousands of our readers delay sending in their subscriptions till several of the numbers of the new volume are out. In order to correct this practice as much as possible, we offer a liberal and very numerous list of Cash Premiums for the greatest number of subscribers sent in by the *fifteenth day of January*. The names of the successful competitors, together with the number of subscribers, will be announced in the February number, and the Premiums immediately paid.

1. TWENTY-FIVE DOLLARS, in Cash, to the person who shall send us the largest number of subscribers (at the lowest club price of 37½ cents each,) before the 15th day of January, 1860. (The order with the money must be *received*, not mailed, on or before the 15th of January.)

2. TWENTY DOLLARS to the person who shall send us the second highest number, as above.

3. NINETEEN DOLLARS to the person who shall send us the third highest number, as above.

4. EIGHTEEN DOLLARS to the person who shall send us the fourth highest list, as above.

5. SEVENTEEN DOLLARS to the person who shall send us the fifth highest list, as above.

6. SIXTEEN DOLLARS to the person who shall send us the sixth highest list, as above.

7. FIFTEEN DOLLARS to the person who shall send us the seventh highest list, as above.

8. FOURTEEN DOLLARS to the person who shall send us the eighth highest list, as above.

9. THIRTEEN DOLLARS to the person who shall send us the ninth highest list, as above.

10. TWELVE DOLLARS to the person who shall send us the tenth highest list, as above.

11. ELEVEN DOLLARS to the person who shall send us the eleventh highest list, as above.

12. TEN DOLLARS to the person who shall send us the twelfth highest list, as above.

13. NINE DOLLARS to the person who shall send us the thirteenth highest list, as above.

14. EIGHT DOLLARS to the person who shall send us the fourteenth highest list, as above.

15. SEVEN DOLLARS to the person who shall send us the fifteenth highest list, as above.

16. SIX DOLLARS to the person who shall send us the sixteenth highest list, as above.

17. FIVE DOLLARS to the person who shall send us the seventeenth highest list, as above.

18. FOUR DOLLARS to the person who shall send us the eighteenth highest list, as above.

19. THREE DOLLARS to the person who shall send us the nineteenth highest list, as above.

20. TWO DOLLARS to the person who shall send us the twentieth highest list, as above.

21. ONE DOLLAR to the person who shall send us the twenty-first highest list, as above.

There is not a town in the United States where any person, by showing his neighbors a copy of the paper and asking them to subscribe, might not take some of the largest of the above Premiums.

Those who do not take any of the Cash Premiums, will be sent of the Specific Premiums, so that we have no blanks.

CLUBS are not required to be at one Post Office, or sent to one address. We send wherever the members of the club may desire. Names can be added to a club at any time.

A TWENTY-FIVE CENT PREMIUM TO EACH SUBSCRIBER!

Rural Annual and Genesee Farmer in Clubs.

As a still greater inducement to form Clubs, we offer the GENESEE FARMER for one year and our beautiful twenty-five cent book, the RURAL ANNUAL AND HORTICULTURAL DIRECTORY FOR 1860, in clubs of eight or upwards, at Fifty Cents the two. In other words, for FOUR DOLLARS we will send *eight copies* of the FARMER for one year and eight copies of the RURAL ANNUAL, together with a RURAL ANNUAL for the person who gets up the Club. For EIGHT DOLLARS we will send *sixteen copies* of the FARMER and *sixteen copies* of the RURAL ANNUAL, and one extra copy of *each* for the person who gets up the club.

Any person sending us THREE DOLLARS for a club of eight of the GENESEE FARMER, shall receive one copy of the RURAL ANNUAL for his trouble.

We send the club to one address, or write the name of each subscriber on his paper, as requested.

POSTAGE.—The postage on the FARMER sent to any place in the State of New York, paid quarterly in advance, is three cents a year; to any other place in the United States, six cents a year. We pay the American postage on all papers sent to the Canada, or any of the other British Provinces. In all cases we pay the postage on the RURAL ANNUAL.

Our Agents, and Competitors for the above Premiums, will remember that our terms are always IN ADVANCE.

☞ Subscription Money may be sent by mail *at my risk, and you need not "register" the letters.*

Address **JOSEPH HARRIS,**
PUBLISHER AND PROPRIETOR,
October 1, 1859. ROCHESTER, N. Y.

STEREOTYPED BY JAMES LENNOX, ROCHESTER, N. Y.